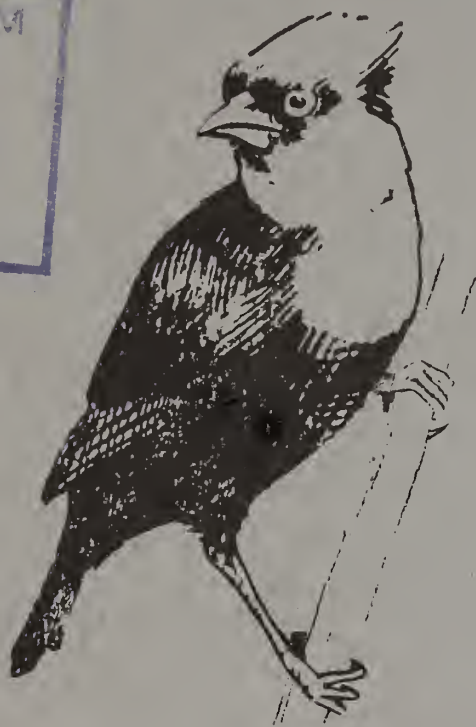
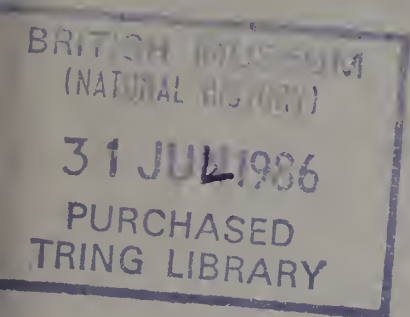


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La Société tire son origine de la "Nigerian Ornithological Society" fondée en 1964. Son but est de promouvoir l'intérêt scientifique pour les oiseaux de l'Ouest-africain et de faire avancer l'ornithologie de ces régions principalement au moyen de son journal *Malimbus* (anciennement the *Bulletin of the Nigerian Ornithologists' Society*).

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CHANGE IN MANAGING EDITORSHIP

Malimbus, and before its inception the **Nigerian Ornithologists' Society Bulletin**, has been edited by Dr C.H. Fry continuously since 1975. Dr Fry is now leaving Aberdeen University to take up an appointment in Oman, and Council has regretfully accepted his resignation as Editor. We are, however, very pleased to announce that Dr H.Q.P. Crick has accepted the post, and he will assume the Editorship with the autumn 1986 issue. With immediate effect the new editorial address is:

Dr H.Q.P. Crick
Tropical Development Research Institute
College House
Wrights Lane
London W8 5SJ, UK.

The Society's connection with Aberdeen University will remain, however, since Dr Crick retains a Research Fellowship at the Zoology Department there and will be visiting Aberdeen at frequent intervals. He will be assisted editorially by two other West African ornithologists, Dr R.A. Cheke of TDRI, London, and Dr R. Wilkinson of Chester Zoological Gardens, UK.

Dr Fry has asked to use this column to give his new address. From 1st August 1986 it will be:

Dr C.H. Fry, Associate Professor,
Department of Biology
Sultan Qaboos University
PO Box 6281, Ruwi,
Muscat, Sultanate of Oman.

Bibliography of African Ornithology 1985

The 1985 bibliography, containing nearly 500 titles, can be had from Dr Fry at his Oman address by sending Omani riyals 2.00 or sterling £3.00 (in notes; no cheques please) and a self-addressed envelope the size of **Malimbus** mailing envelopes.

THE BIRDS OF NINDAM FOREST RESERVE, KAGORO, NIGERIA

by M. Dyer, M.E. Gartshore and R.E. Sharland

Received 16 January 1985

Revised 5 October 1985

INTRODUCTION

In the following account we use the vegetation classification of White (1983). In the Guinea-Congolia/Sudania regional transition zone of Nigeria lie several outliers of lowland rain forest adjacent to, and south of Jos Plateau. It is not known if they are relict patches of formerly more extensive forest, or have arisen purely from local geographical and climatological conditions (Jones 1963). Near Kagoro (09°32'N, 08°30'E) in Kaduna state are several such outliers, many of which are found in large forest reserves (Fig. 1). One of them, Nindam Forest Reserve (approx. 3000 ha) is easily accessible, and on a brief visit there in 1976 we encountered birds typical of the main forest block over 100 km to the south, e.g. Blue Plantain-eater Corythaeola cristata, Shrike Flycatcher Megabyas flammulata and Collared Sunbird Anthreptes collaris. We sensed that the Kagoro area, particularly Nindam, would be interesting to investigate ornithologically, and this paper reports our findings.

STUDY AREA AND METHODS

Nindam Forest Reserve is characterized by a series of parallel, round-topped ridges and deep, V-shaped, forest-filled valleys containing ephemeral streams. The vegetation changes from rain forest to transitional forest and closing savanna on valley slopes, and then to savanna on the ridge-tops. Shifting cultivation has altered some of the valley bottoms, and cattle-grazing and burning have degraded the savanna along the ridges to some extent. Numerous saw-pits in the forest are indicative of past exploitation for timber. Presently, dead wood is removed for fuel but no other cutting is legally permitted. Local villagers burn the forest floor to kill fire-sensitive trees and then later remove the dead wood. This has allowed the spread within the forest of adventitious weeds and constitutes the major threat degrading Nindam Forest Reserve.

The flora of Nindam is imperfectly known, but some features are striking and worth mentioning here. Trees characteristic of lowland rain forest, such as Parinari kerstingii, Aubrevillea kerstingii, Blighia unijugata, Canarium schweinfurthii, Ficus varifolia, Napoleona imperialis and Myrianthus arboreus have been identified. Unlike the grass dominated savanna, the forest floor is covered with pteridophytes (mainly Selaginella) and members of the ginger family (Zingiberaceae). In more humid patches the trees and rocks are festooned with epiphytic orchids, mosses and ferns.

In addition to a rich avifauna, Nindam supports species of forest-inhabiting vertebrates which are north of their previously known geographical ranges in West Africa, e.g. the small gliding lizard Holaspis guentheri. Forest mammals such as Two-spotted Palm-civet Nandinia binotata and Mona Monkey Cercopithecus mona were occasionally observed or turned up in hunters' bags. The mouse Praomys jacksoni is the expected species in forest outliers but surprisingly at Nindam only the true high forest species Praomys tullbergi has been found. Many cave-dwelling bats, rare or previously unknown in Nigeria, have been found including Rhinolopus aethiops, Rhinolophus darlingi and Hipposideros ionesi. The tiny forest bat which inhabits weaver nests Kergulia smithii was also found.

The dominant geological feature of Kagoro is the Kagoro Hills, a westward extension of the Jos Plateau. These rocky hills rise abruptly to more than 1300 m, nearly 500 m above Kagoro town. Due to its proximity to the Jos Plateau, the Kagoro area receives more rainfall than other locations of similar latitude in Nigeria. Kafanchan (Fig. 1) has a mean annual rainfall of 1554 mm, whereas Minna 180 km due west receives

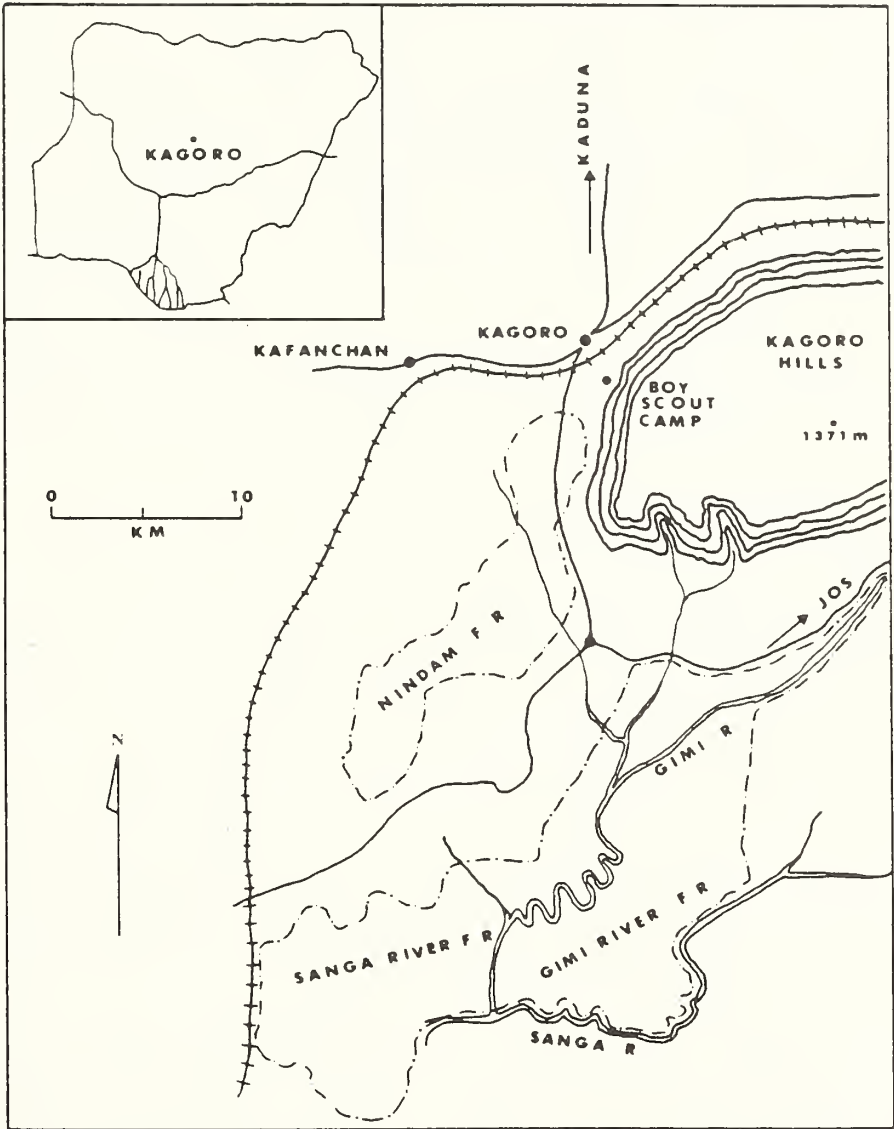


Figure 1 Study area at Kagoro and environs, Kaduna State, Nigeria.

1400 mm (Jones 1963). The higher reading at Kafanchan is due to orographic rainfall from southwesterly winds blowing up the Niger Valley and meeting the Plateau.

Nindam was first visited on 19 Dec 1976. On a second visit in Feb 1977 MEG discovered Purple-throated Cuckoo-Shrike Campephaga quiscalina there, the first record for Nigeria. Between Mar 1977 and May 1979 RES visited Nindam 12 times, covering all months except Jan, Oct and Dec. On 13 Sep 1977 he netted Red-capped Robin-chat Cossypha natalensis, another new species for Nigeria. Starting in Jun 1979 a concerted effort was made by all of us to make observations at Nindam at least once per month for two days. We generally confined our observational studies to a 400 ha area of the reserve bisected by the main Kaduna-Jos road. (In addition we made three visits to other reserve areas nearby, principally the Sanga River and Gimi River Reserves; a list of species seen there, additional to those recorded for Nindam and Kagoro given in Table 1, appears in Appendix 2).

When our study ended in Sep 1981 we had made a minimum of three visits to Nindam for each month of the year. For most visits we based ourselves at the National Boy Scout Training Camp near the foot of Kagoro Hills; at other times we camped by the forest edge. Nets were erected at standard locations in forest, and tended from dawn until 0930 h, and again from 1500 h until dusk. When not tending nets we hiked well-established trails, recording by sight and sound all species encountered. Due to the parallel orientation of valleys and ridges in the reserve, the trails we followed passed alternately through patches of rain forest and strips of savanna.

Netted birds were weighed, ringed with numbered metal or plastic rings, and measured (wing chord). We attempted to accumulate 120 net-hours of work in the forest, and 10 h of trail-hiking for each two-day visit.

RESULTS

104 species were recorded in Nindam Forest Reserve, and an additional 83 species from the immediate vicinity of Kagoro (Appendix 1). We feel this list is incomplete due to the bias given towards field-work in Nindam. Our records of species outside the reserve were collected opportunistically and no systematic method was undertaken to quantify or qualify the status and abundance of species outside Nindam. This point is clearly illustrated by Appendix 1, where the occurrence of common and widespread resident savanna species is spottily documented (e.g. Bronze Mannikin Lonchura cucullata, Yellow White-eye Zosterops senegalensis). Other common species appear to have been overlooked completely, but no doubt occur at Kagoro, for instance Senegal Coucal Centropus senegalensis and Village Weaver Ploceus cucullatus.

About 20 km south of Kagoro lie the Gimi River and Sanga River Forest Reserves, larger in area than Nindam (Fig. 1). We visited these reserves three times during the dry season (Dec and Jan), and recorded birds not found at Nindam. Sanga and Gimi supported areas of mature savanna woodland and forest of a type intermediate between gallery and lowland

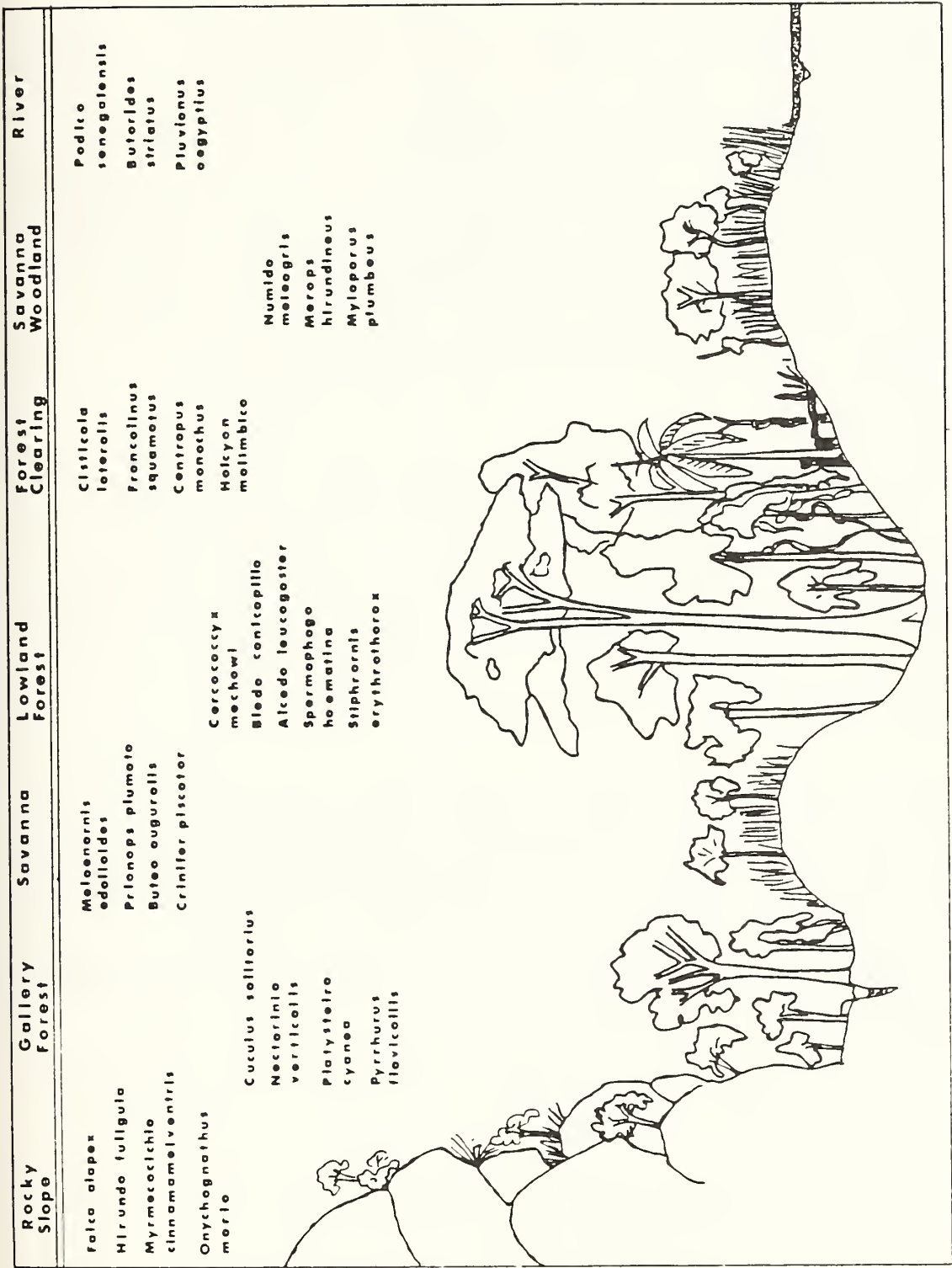


Figure 2 Hypothetical transect from Kagoro Hills (on left) to Sanga River Reserve, showing main habitats likely to be encountered. Under each habitat are species typical of those habitats.

forest. We saw many species recorded for Kagoro, but the presence of large, perennially-flowing rivers in the reserves contributed to a selection of aquatic and riparian species (Appendix 1). The most noteworthy observation was a pair of Brown-chested Lapwings *Vanellus superciliosus*, an intra-African migrant known to breed in grassy savannas of Nigeria (Elgood 1982).

Some birds seen at Nindam have wide ranges in Nigeria, such as Klaas Cuckoo Chrysococcyx klaas and Kurrichane Thrush Turdus pelios, but others, including four new species to Nigeria, have limited ranges. The four new species are Yellow-throated Cuckoo Chrysococcyx flavigularis, Bates' Swift Apus batesi, and the previously mentioned Purple-throated Cuckoo-Shrike and Red-capped Robin-Chat. Examples of rare and little known rain forest species of limited range in Nigeria and found at Nindam, are Spotted Honeyguide Indicator maculatus, Capuchin Babbler Phyllanthus atripennis and Little Grey Flycatcher Muscicapa epulata. Many records of forest birds at Nindam were obtained by mist-netting. Forest Robins Stiphornis erythrothorax and Little Greenbuls Andropadus virens were observed in comparatively small numbers in the forest undergrowth, yet they accounted for 37% of the total birds ringed (Appendix 3). The White-browed Forest-Flycatcher Fraseria ocreata, recorded only once, was caught in a net.

The diversity of birds recorded at Nindam is due to the juxtaposition of different habitats in a relatively small area. In a distance of 500 m it was possible to pass through mature savanna, undisturbed rain forest, timber-cleared areas, regenerating and secondary forest. We can illustrate this concept more clearly by considering a hypothetical transect through a much larger area to include all habitats between the Kagoro Hills and the larger rivers found in the Sanga and Gimi Reserves (Fig. 2).

DISCUSSION

Our study revealed many surprises, not least of which was the diversity of rain forest birds encountered at Nindam. About 40 species are regarded as stenotropic in their choice of rain forest habitat elsewhere in Nigeria, so the presence of species such as Blue-throated Roller Eurystomus gularis, Capuchin Babbler and Honeyguide Bulbul Baeopogon indicator in a relatively small and isolated area of forest in savanna is remarkable. Fifteen species recorded at Nindam were 300 km or more north of their previously known ranges in Nigeria. Adding to that the discovery of four new Nigerian species, the importance of the Kagoro area in general, and Nindam in particular, cannot be overstated.

Contained below is a list of essentially forest birds found at Kagoro with comments on status and habits.

West African Goshawk Accipiter toussenelii A bird of forest growth; sometimes netted as it attacked already netted birds.

Western Little Sparrowhawk Accipiter erythropus Recorded in March 1977, there is only one other record outside the derived savanna zone, at Yankari Game Reserve in the dry season.

Cuckoo Falcon Aviceda cuculoides The occurrence of Cuckoo Falcons at Kagoro during the dry season only is noteworthy since Elgood (1982) regards this species as a wet season visitor to savanna zones of northern Nigeria.

Red-footed Falcon Falco vespertinus Several were recorded on passage at Nindam in Mar/Apr, and a flock of 5,000+ birds was seen feeding on swarming termites near Kafanchan on 19 Apr 1980.

Scaly Francolin Francolinus squamatus Restricted to disturbed forest and clearings, especially near ridge-tops. Small flocks were often heard but infrequently seen during the wet season. This species is found further north at Anara Forest Reserve near Zaria (Gartshore 1982).

Pigmy Spotted Rail Sarothrura pulchra The piping call of the Pigmy Spotted Rail was a characteristic sound of Aframomum thickets in wet valley bottoms of large forest tracts. The species was rarely seen.

Tambourine Dove Turtur tympanistra Found along with T. abyssinica in the forest (ground level to 10 m). Of five doves caught, one was a recently-fledged juvenile (26 Oct 1980).

Giant Plantain-eater Corythaeola cristata Common resident of high forest canopy, occasionally extending into gallery forest around the base of Kagoro Hills.

Yellow-throated Cuckoo Chrysococcyx flavigularis Our observations on this species represent the first records for Nigeria. The characteristic song of this cuckoo was first heard on 8 Jul 1979, at the edge of a forest clearing, but it was not positively identified until 11 Nov. C. flavigularis generally occupied thick forest, but one was once seen flying through savanna between two forest patches. It called at all seasons and was probably resident.

Emerald Cuckoo Chrysococcyx cupreus A typical forest cuckoo which overshoots to as far north as Zaria on its northward migration at the beginning of the rains; common at Kagoro during the rainy season. Its status in the dry season at Kagoro is uncertain.

Dusky Long-tailed Cuckoo Cercococcyx mechowi Calls heard constantly between Apr and Dec. Although neither heard nor seen in the intervening months, their status as residents is in little doubt.

Thick-billed Cuckoo Pachycoccyx audeberti These cuckoos were seen regularly at Nindam. Given the thinly scattered records from gallery forest in other parts of Nigeria (Elgood 1982) this is of interest. A flock of five birds wheeled over the forest canopy on 17 Jun 1979.

African Wood-Owl Ciccaba woodfordii A rufous-phased adult was netted on 16 Sep 1981. It is present the whole year as indicated by calls.

Bates' Swift Apus batesi Four individuals were observed 27 Sep 1979 following a rainstorm flying low over forest. They circled for a few moments around the crown of a large forest tree before flying over the forest and out of sight. Two more were seen in the Kagoro Hills on 17 Feb 1980. They were identified by their small size, all black colouration, forked tail and rapid fluttering, twisting flight. (A second locality was obtained by MD and MEG at 1600 m on the Obudu Plateau in Sep 1980). This species is common in the highlands of Cameroon and is easily detected by its constant Swallow-like twittering. It is not

unexpected in Nigeria and may have been previously overlooked.

White-bellied Kingfisher Alcedo leucogaster Caught frequently during the study, mostly in nets set across forest streams. A juvenile with blackish bill was netted on 4 Nov 1980.

European Bee-eater Merops apiaster This nonforest bee-eater overwinters at Kagoro in small numbers. Nindam may prove to be its most northerly wintering location in Nigeria.

White-throated Bee-eater Merops albicollis Normally migrates from the sub-Saharan region where it breeds to the forest zone where it spends the dry season. The large numbers at Kagoro may represent the most northern most nonbreeding locality in Nigeria.

Blue-throated Roller Eurystomus gularis Regularly but rarely seen feeding or displaying over forest, and were presumed to be resident.

Allied Hornbill Tockus fasciatus Often seen in the 'middle belt' of Nigeria where forest outliers are common. It was common at Kagoro over the forest.

Piping Hornbill Bycanistes fistulator Another forest hornbill seen at Nindam as well as at the Boy Scout Camp.

Ceratogymna sp. Serle (1939) reported one of the Ceratogymna hornbills from the Kafanchan area, but none were recorded during the present study.

Black-and-White-Casqued Hornbill Bycanistes subcylindricus This large hornbill was rarely seen in the subcanopy of dense forest. A family party was observed 27 Sep 1979.

Double-toothed Barbet Lybius bidentatus These were uncommon residents of mid-level forest, and only one was netted.

Spotted Honeyguide Indicator maculatus This honeyguide was rarely observed although heard calling all year round, usually high in the forest canopy. Five calling posts were identified in the study area and one of these was used consistently through the five year period. Our observations represent the fourth record for Nigeria. It was netted in riverine woodland by Hall (1977) near Serti.

Willcocks' Honey-guide Indicator willcocksi Although encountered less frequently than I. maculatus, two were netted.

Prodotiscus sp. On 9 Sep 1979 a Prodotiscus honeyguide was observed flycatching at the edge of forest above a steep ravine, the only observation of this genus at Nindam.

Green-backed Woodpecker Campethera cailliautii A common species of mid-strata forest more frequently detected by call than by sight.

Buff-spotted Woodpecker Campethera nivosa Seen at mid-canopy level, C. nivosa was netted once and seen during the wet season only; it could be a wet season immigrant to Nindam although it is not known to be migratory in West Africa.

Purple-throated Cuckoo-Shrike Campephaga quiscalina Our observations of this species represent the first records for Nigeria but since it occurs in forested areas both east and west of Nigeria its presence in this country is not unexpected. This cuckoo-shrike occupies the canopies of trees above about 30 m height. It is best identified by the appearance of the female which is bright yellow beneath.

Slender-billed Greenbul Andropadus gracilirostris A canopy species which is often very difficult to detect. It was observed on only a few occasions. A bird of old-growth secondary forest, it is not expected at this northerly latitude.

Little Grey Greenbul Andropadus gracilis Found in the canopies of small trees overgrown by lianes. It is confined to the mid-strata and is apparently never netted near the ground.

Little Greenbul Andropadus virens A common species of forest and gallery forest at Kagoro. It was frequently netted.

Honeyguide Greenbul Baeopogon indicator A species of true forest, uncommon at Kagoro.

Grey-headed Bristle-Bill Bleda canicapilla This bristle-bill was frequently netted in the lower forest stratum in Nindam.

Nicator Nicator chloris Frequently heard among vines and tangles at Kagoro but never netted.

White-throated Greenbul Phyllastrephus albigularis This bulbul might be considered to behave as two "ecological species" in that males were distinctly larger-bodied and longer-billed than females (Fig. 3).

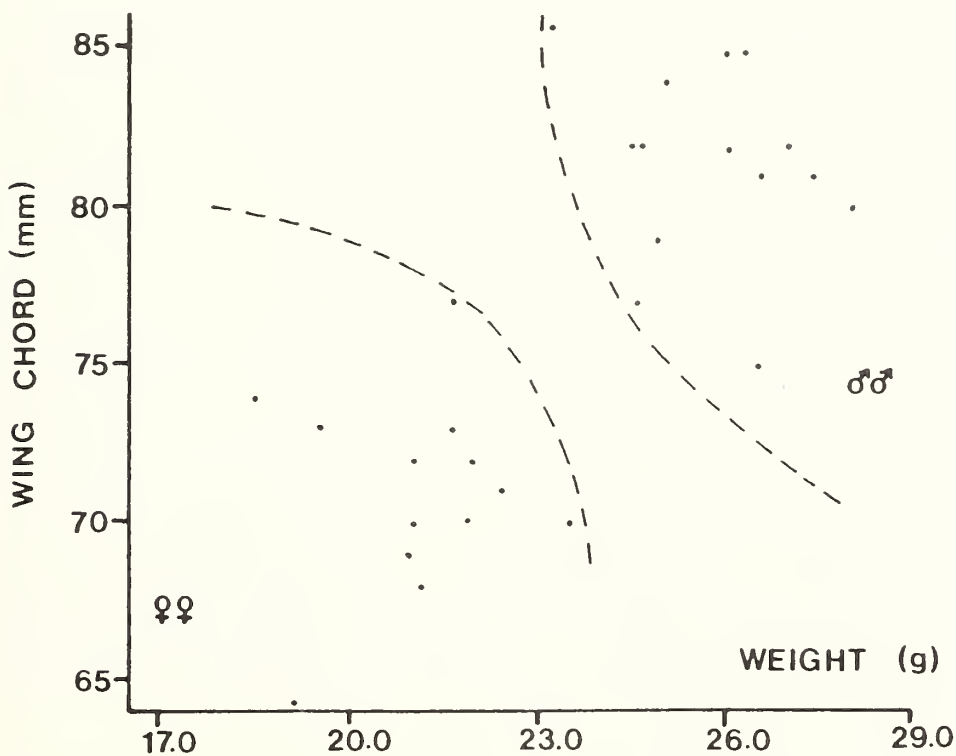


Figure 3 Body weight and wing length of male and female white-throated Greenbuls netted at Nindam.

Leaf-Love Pyrrhurus scandens A common bird of forest undergrowth at Kagoro; family parties were frequently netted.

Malaconotus sp. A shrike was heard regularly but was never seen. Once we had a brief view of a possible Sulfur-breasted Bushshrike Malaconotus sulfureopectus but we still cannot rule out the possibility of the presence at Nindam of such forest species as Many-coloured Bushshrike M. multicolor.

Red-capped Robin-Chat Cossypha natalensis Previously unrecorded in Nigeria; it proved to be a relatively common breeding resident of denser patches of forest. 24 individuals were ringed in all, including several birds in spotted juvenile plumage. On 15 June 1980 a nest containing three glossy, chocolate brown eggs in a small tree hollow about 1.5 m above ground in dense lowland forest was photographed. This represents the first recorded breeding of this bird north of the Congo. The single Cameroon specimen from Yaoundé is thought to be extralimital.

Snowy-crowned Robin-Chat Cossypha niveacapilla A regular dry-season visitor, arriving from drier savanna habitats to the north.

Forest Robin Stiphrornis erythrothorax Our most commonly netted bird; it is normally inconspicuous in the undergrowth.

Capuchin Babbler Phyllanthus atripennis The distribution of Capuchin Babbler appears to be disjunct; the only other known location for this species is within 80 km of Lagos (600 km southwest of Kagoro).

Puvel's Illadopsis Trichastoma puveli An uncommon resident of lowland rain forest the Kagoro records represent a substantial range extension to the north.

Brown Illadopsis Trichastoma fulvescens A bird of thickets in high forest this species was infrequently netted. It is possibly disjunct from populations occurring further to the south.

Green-backed Camaroptera Camaroptera chloronota This warbler was common in the forest undergrowth, and frequently netted.

Buff-throated Apalis Apalis rufogularis A species of the forest canopy; rarely caught (Appendix 2).

Whistling Cisticola Cisticola lateralis Permanent residents of the grassy/shrubby forest clearings, this species was occasionally netted.

White-browed Forest Flycatcher Fraseria cinerascens This flycatcher was recorded only once, a female with oviducal egg netted on 17 Feb 1980. It is not known to be migratory.

Little Grey Flycatcher Muscicapa epulata A bird of tall trees and dead limbs at the forest-savanna ecotone. Although not confirmed for Nigeria a bird fitting the description of this species and not easily assignable to any other Nigerian flycatcher was observed infrequently. Also recorded at Ayangba (feeding on a small skink which it had plucked from a tree trunk). Probably overlooked.

Shrike Flycatcher Megabyas flammulata These were uncommon inhabitants of the forest mid-storey. No birds were netted.

Collared Sunbird Anthreptes collaris An abundant bird of forest clearings, this is a species associated with derived savanna and high forest.

Olive Sunbird Nectarinia olivacea An abundant sunbird of the forest undergrowth, this species was frequently netted. It is also known from other outlier forests such as Kainji (Elgood 1982).

Variable Sunbird Nectarinia venusta Considered to be a wet season visitor to the savanna zone, this sunbird was a regular dry season visitor to disturbed habitats at Kagoro.

Buff-throated Sunbird Nectarinia adelberti This species was recorded once in February 1980 at the peak of tree flowering. It was seen at the same time as Superb Sunbird and both may be considered 'blossom nomads' which occasionally frequent more northerly latitudes in pursuit of nectar.

Superb Sunbird Nectarinia superba A pair seen February 1980 along with the above species as a 'blossom nomad' appearing at Nindam when forest trees are flowering.

Blue-bill Spermaphaga haematina This finch was found inside the forest and was an uncommon resident of the undergrowth.

Splendid Glossy Starlings Lamprotornis splendidus These starlings occurred in flocks at Nindam, but there was no evidence of breeding in the area.

Sudanian Woodland corresponds to Northern Guinea Savanna of Keay (1959) and Guinea-Congolia/Sudania regional transition zone corresponds to Southern Guinea Savanna and derived savanna. Mapping Unit 12 (Mosaic of Guinea-Congolian rain forest, Isoberlinia woodland and secondary grassland) describes well the situation found in the vicinity of Kagoro.

Several forest birds extend into the Sudanian Woodland in gallery or riverine forest. These include the Yellowbill, Guinea Touraco, Narina's Trogon to name a few. Other species such as Green-headed Sunbird, Violet Plantain-eater, Black-cap Babbler are confined to forest galleries in Sudanian Woodland (see Fry 1974) but probably occupy a more continuous woodland area in the Guinea-Congolia/Sudania regional transition zone though information on their distribution here is lacking. Forest outliers typical of the Guinea-Congolia/Sudania regional transition zone are not suitable habitats for these species and such outliers are therefore occupied by birds of essentially forest distribution. At Kagoro at least 52 forest birds are found with a nearly complete suite of forest bulbuls (see Fig. 4 and accounts above).

Part of this forest element at Kagoro is made up of species which are rare or previously unrecorded for Nigeria. These include Red-capped Robin-Chat, Capuchin Babbler, Spotted Honeyguide, Yellow-throated Cuckoo, Purple-throated Cuckoo-Shrike. These species are, for the most part,

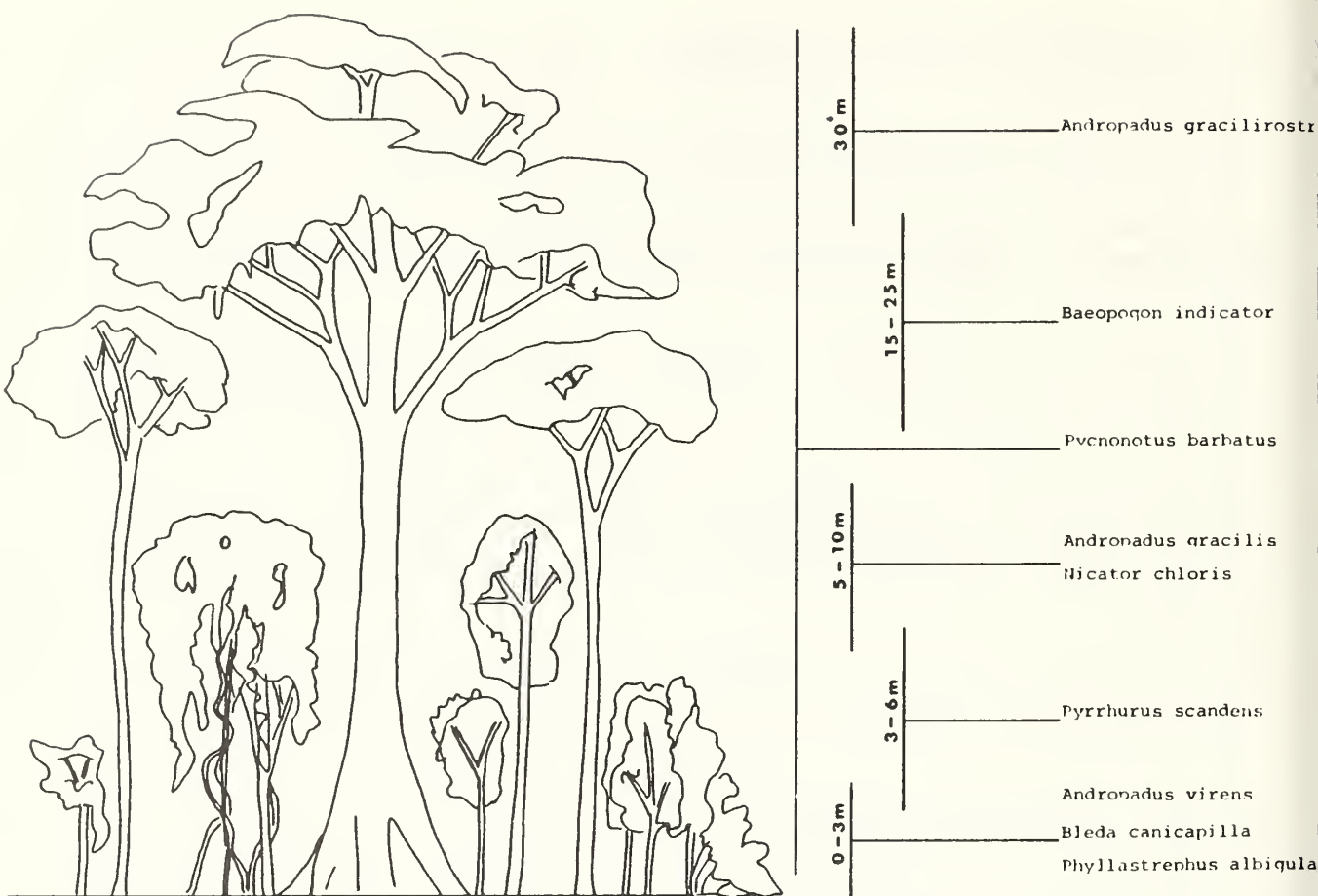


Figure 4 Vertical zonation of forest pycnonotids at Nindam.

sedentary and represent disjunct populations. Their presence may indicate that Kagoro is a refugium.

Evidence for African refugia is scarce particularly in or adjacent to the Congo Forest Block (Hamilton 1982). Hamilton (1982) concludes, from the available information, that Africa experienced much greater aridity between 21,000 and 12,000 B.P. Following the retreat of temperate glaciers Africa experienced a warmer, wetter climate. Recent palynological evidence suggests that forest cover in Africa began to increase at about the close of the last glaciation 12,000 years ago. In order to account for the present distribution of birds in West Africa, intact patches of forest sufficient to support viable populations of birds must have existed throughout the driest times. Some forest patches must exist which are sufficiently isolated that the species they contained found no opportunity to expand and occupy wider areas. Zones of species richness today are those which receive greater than average rainfall within the forested zone. These areas correspond to former refugia during glacial periods (Hamilton 1982). Two conditions characteristic of refugia are the presence of disjunct populations and a greater local rainfall (Hamilton 1982). The disjunct populations of birds are of two types at Kagoro: north-south and east-west. The east-west disjuncts are more interesting because they do not indicate a northward adventive re-population of forest patches on a seasonal basis. Purple-throated

Cuckoo-shrikes and Red-capped Robin-Chats are two such species. Although less information is available this pattern of east-west disjuncts may be similar for bats. The presence of migrants and nomads during the dry season at Kagoro such as White-throated Bee-eater, European Bee-eater, Snowy-crowned Robin-Chat, Cuckoo Falcon and Buff-throated Sunbird (birds which are normally found at this time much further south) may not have historical significance but indicates to us that Kagoro still possesses characteristics of true high forest.

CONSERVATION: A PLEA

Sadly, data are too few on 'middle belt' forest outliers to conclude that our records of rare birds for Kagoro are indeed unique. Surveys of many other forest outliers throughout the Guinea-Congolia/Sudania regional transition zone would yield important information about how species survive in and re-invade from isolated patches. Fortunately much of the middle belt zone of Nigeria remains intact due to a depopulation of that area towards urbanized zones or more favourable tsetse-free areas. Research in this area and protection of forest outliers should be encouraged as we have much to gain from their study.

Clearly from a scientific standpoint Kagoro area may have great significance as a possible refugium at the time of tropical aridity during temperate glacial maxima. Our impression is that the avifauna at Kagoro/Nindam may be unique in Nigeria, and we wish to plead a strong case for conserving this richly diverse and scenically beautiful area.

SUMMARY

The birds and other organisms were studied at Kagoro from 1976 to 1981. During this time about 40 species of stenotypic forest birds were documented including four species new to Nigeria. One species, the Red-capped Robin-Chat was discovered as a breeding bird at Kagoro but previously was not known north of the Congo. Speculation is given as to whether Kagoro represents a refugium.

ACKNOWLEDGEMENTS

We wish to express our thanks to all those who joined us on weekends at Kagoro making our visits there both more productive and more enjoyable.

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M. Dyer, Chelinda, Nyika National Park, P.M.B. 6, Rumphi
P.O., Malawi

M.E. Gartshore, RR 3, Dundas, Ontario, L9H 5E3, Canada

R.E. Sharland, Flat 7 Elmsdown Court, Southampton Road,
Ringwood, Hants. U.K.



Dusky Long-tailed Cuckoo Cercococcyx mechowi, Nindam, Nigeria, 1981.

Photo: R.E. Sharland.

Appendix 1 Status, abundance and habitat of birds recorded at Kagoro

STATUS A = abundant, C = common, U = uncommon, R = rare, RE = permanent resident, DV = dry season visitor (Oct-Apr), WV = wet season visitor (May-Sept), VI(?) = visitor of undetermined seasonal status, PM = palaeartic migrant (either resident at Kagoro during its stay or transient through the area), and IM = intra-african migrant.

ABUNDANCE An indication of the number of birds likely to be encountered per two-day visit: 1 = 1 to 5 birds, 2 = 6 to 20 birds, 3 = 21-50 birds, 4 = 51 to 100 birds, 5 = 100 birds.

HABITAT (Main habitat in which each species recorded): F = forest, S = savanna, DF = disturbed forest (includes timber clearings, regrowth, cultivation and old village sites), DS = disturbed savanna (includes cultivation, man-made fadamas, human habitation), SG = gallery forest along streams and around inselbergs in savanna, KH = rocky habitats on Kagoro Hills.

SPECIES	J	F	M	A	M	J	J	A	S	O	N	D	STATUS	ABUNDANCE	HABITAT
<u>Ardeola ibis</u>	x	x											U DV	4	DS
* <u>Ciconia abdimii</u>			x										R IM	1	DF
* <u>Dendrocygna viduata</u>							x						R WV	1	DF
* <u>Gypohierax angolensis</u>	x	x	x	x	x	x	x	x	x	x	x	x	U RE	1	F & S
* <u>Neophron monachus</u>	x	x	x	x	x	x	x	x	x	x	x	x	C RE	3	DF & DS
* <u>Gyps bengalensis</u>								x					R VI	1	S
* <u>Circaetus cinerascens</u>				x			x	x				x	R RE?	1	F
<u>Circaetus cinereus</u>					x								R VI	1	S
* <u>Polyboroides radiatus</u>	x	x	x	x	x	x	x	x	x	x	x	x	U RE	1	F & S
<u>Accipiter badius</u>	x	x										x	R DV	1	S & DS
* <u>Accipiter erythropus</u>			x										R VI	1	DF
* <u>Accipiter melanoleucus</u>	x	x						x					R VI	1	DF & DS
* <u>Accipiter toussenelii</u>	x		x		x	x	x		x	x	x	x	U RE	1	F
<u>Buteo auguralis</u>	x		x	x	x		x		x	x	x	x	U RE	1	S
* <u>Kaupifalco monogrammicus</u>	x	x	x	x	x	x	x	x	x	x	x	x	U RE	2	F & SG
<u>Aquila rapax</u>		x							x				R VI	1	S
<u>Aquila wahlbergi</u>										x			R VI	1	DS
* <u>Aviceda cuculoides</u>	x	x	x							x	x	x	U VI	1	F & S
<u>Elanus caeruleus</u>											x		R VI	1	DS
<u>Machaerhamphus alcinus</u>										x	x		R RE?	1	S
* <u>Milvus migrans</u>	x	x	x		x						x	x	C DV	3	DF & FS
<u>Pernis apivorus</u>												x	R PM	1	DS

* Recorded in Nindam Forest Reserve.

SPECIES	J	F	M	A	M	J	J	A	S	O	N	D	STATUS	ABUNDANCE	HABITAT
<u>Falco alopex</u>	x	x	x	x	x	x	x	x	x	x	x	x	U RE	1	KH
<u>Falco biarmicus</u>	x	x										x	U DV	1	KH
* <u>Falco vespertinus</u>			x	x									R PM	5	F, S & DS
* <u>Francolinus squamatus</u>			x	x	x	x			x		x		U RE	2	DF
<u>Ptilopachus petrosus</u>			x									x	U RE?	2	KH
<u>Crex egregia</u>								x					R WV	1	DS
<u>Porphyrio alleni</u>								x					R WV	1	DS
* <u>Sarothrura pulchra</u>		x	x	x	x	x		x	x	x	x		U RE	1	F
<u>Streptopelia lugens</u>	x									x			R VI	1	KH
* <u>Streptopelia semitorquata</u>	x	x	x		x	x		x	x		x	x	U RE	2	F ? S
<u>Streptopelia senegalensis</u>		x	x	x		x	x	x		x		x	U RE	2	DS
<u>Streptopelia vinacea</u>	x	x	x	x						x	x	x	U DV	2	DS
* <u>Treron australis</u>	x	x	x	x	x	x	x	x	x	x	x	x	C RE	3	F & SG
* <u>Turtur afer</u>	x	x	x	x	x	x	x	x	x	x	x	x	C RE	3	F & SG
* <u>Turtur tymanistria</u>	x	x	x	x	x	x	x	x	x	x	x	x	U RE	2	F
<u>Agapornis pullaria</u>		x										x	R VI	1	SG
* <u>Corythaeola cristata</u>	x	x	x	x	x	x	x	x	x	x	x	x	U RE	2	F
<u>Crinifer piscator</u>		x	x				x						U RE?	1	S
* <u>Musophaga violacea</u>				x		x	x		x		x		U RE	1	F & SG
* <u>Tauraco persa</u>	x	x	x	x	x	x	x	x	x	x	x	x	C RE	3	F
* <u>Cercococcyx mechowii</u>	?	?	?	x	x	x	x	x	x	x	x	?	U RE	2	F
<u>Chrysococcyx caprius</u>					x	x	x	x					U WV	2	S
* <u>Chrysococcyx cupreus</u>	?	?	?	x	x	x	x	x	x	x	x	?	U RE	2	F
* <u>Chrysococcyx flavigularis</u>		x		x	x		x				x	x	R RE	1	F
* <u>Chrysococcyx klaas</u>	x	x	x	x	x	x	x	x	x	x	x	x	U RE	2	F & S
* <u>Cuculus clamosus</u>		x		x	x	x	x					x	U WV?	1	F
<u>Cuculus solitarius</u>			x	x	x	x	x	x	x				U WV	1	SG
* <u>Pachycoccyx audeberti</u>	x			x	x	x				x	x	x	R RE	1	F & S
* <u>Ceuthmochares aureus</u>	x	x	x	x	x				x	x	x	x	U RE	1	F & SG
* <u>Centropus monachus</u>						x				x			R VI	1	DF
<u>Tyto alba</u>			x									x	R VI	1	DS
<u>Bubo africanus</u>	x	x	x				x			x	x	x	R RE	1	S
* <u>Ciccaba woodfordii</u>	x	x	x			x			x	x	x		U RE	1	F
<u>Caprimulgus tristigma</u>	x	x	x		x		x		x	x	x	x	U RE	2	KH
<u>Apus affinis</u>	x	x	x	x	x	x	x	x	x	x	x	x	A RE	5	S & DS
* <u>Apus apus</u>	x							x		x			U PM	4	Aerial
* <u>Apus batesi</u>		x	x	x					x				R VI	1	Aerial
* <u>Apus caffer</u>	x			x	x					x			U VI	2	Aerial
* <u>Cypsiurus parvus</u>	x	x	x	x					x	x	x	x	C DV	3	DF & DS
<u>Colius striatus</u>						x	x	x	x	x	x	x	U RE	2	S
* <u>Alaloderma narina</u>		x	x		x	x			x	x			U RE	1	F
* <u>Alcedo leucogaster</u>	x		x	x	x	x			x			x	U RE	1	F
<u>Ceyx picta</u>		x	x	x		x				x			U RE	1	S
<u>Halcyon leucocephala</u>	x	x	x	x							x	x	U DV	1	S
* <u>Halcyon malimbica</u>	x	x	x	x	x	x	x	x	x	x	x	x	U RE	1	F & SG
* <u>Merops albicollis</u>	x	x	x	x	x	x				x	x	x	C DV	5	F & S
* <u>Merops apiaster</u>	x	x	x	x					x	x	x	x	U PM	4	F & S
<u>Merops hirundineus</u>	x		x							x		x	R VI	1	S
* <u>Coracias cyanogaster</u>						x						x	R VI	1	DF
* <u>Coracias naevia</u>									x				R VI	1	DF

SPECIES	J	F	M	A	M	J	J	A	S	O	N	D	STATUS	ABUNDANCE	HABITAT
* <u>Eurystomus gularis</u>	x	x	x	x	x	x	x		x	x	x		U RE	1	F
* <u>Bycanistes fistulator</u>	x	x	x	x	x	x	x	x	x	x	x	x	C RE	2	F
* <u>Bycanistes subcylindricus</u>	x	x		x						x	x		R VI	1	F
* <u>Tockus fasciatus</u>	x	x	x	x	x	x	x	x	x	x	x	x	C RE	3	F
<u>Tockus nasutus</u>	x	x	x	x						x	x	x	U DV	3	S
* <u>Lybius bidentatus</u>	x		x	x	x		x	x	x	x	x	x	U RE	1	F
<u>Lybius dubius</u>												x	R VI?	1	S
<u>Lybius vieilloti</u>												x	R VI?	1	S
* <u>Pogoniulus bilineatus</u>	x	x	x	x	x	x	x	x	x	x	x	x	C RE	2	F
<u>Pogoniulus chrysoconus</u>		x	x								x		U VI	1	S
<u>Indicator indicator</u>	x	x	x								x	x	U DV	1	S
* <u>Indicator maculatus</u>	x	x	x	x	x	x	x	x	x	x	x	x	U RE	1	F
* <u>Indicator willcocksi</u>	x		x		x						x		R RE?	1	F
* <u>Prodotiscus sp.</u>									x				R VI	1	F
* <u>Campethera cailliautii</u>	x	x	x	x	x	x			x	x	x	x	U RE	1	F
* <u>Campethera nivosa</u>					x	x	x		x				U VI?	1	F
* <u>Dendropicos fuscens</u>		x	x	x							x	x	U DV?	1	F & SG
<u>Dendropicos obsoletus</u>	x											x	R VI	1	S
<u>Mesopicos goertae</u>		x									x		R VI	1	S
<u>Delichon urbica</u>				x									R PM	1	S
<u>Hirundo abyssinica</u>		x	x	x	x	x	x						C WV	3	S
<u>Hirundo aethiopica</u>	x	x											U VI	1	S
<u>Hirundo daurica</u>	x	x											U VI	1	S
<u>Hirundo fuligula</u>	x	x	x	x	x	x	x	x	x	x	x	x	U RE	2	KH
<u>Hirundoi semirufa</u>			x										R VI	2	S
<u>Hirundo senegalensis</u>												x	R VI	1	S
* <u>Psalidoprocne obscura</u>		x	x	x		x	x	x	x				C WV	2	DF & SG
* <u>Hirundo smithii</u>			x		x					x	x	x	U RE	1	DF
* <u>Anthus leucophrys</u>	X	X			x				x	x	x	x	U RE	1	DF & S
* <u>Campephaga phoenicea</u>	x		x	x						x	x	x	U DV?	1	F & S
* <u>Campephaga quiscalina</u>		x		x	x						x		R RE?	1	F
* <u>Andropadus gracilirostris</u>		x	x	x	x				x	x			R RE	1	F
* <u>Andropadus gracilis</u>	x		x	x	x				x			x	R RE	1	F
* <u>Andropadus virens</u>	x	x	x	x	x	x	x	x	x	x	x	x	C RE	3	F
* <u>Baeopogon indicator</u>	x	x	x	x	x	x	x	x	x	x	x	x	U RE	2	F
* <u>Bleda canicapilla</u>	x	x	x	x	x	x	x	x	x	x	x	x	U RE	2	F
* <u>Nicator chloris</u>						x	x	x	x	x	x	x	R RE	1	F
* <u>Phyllastrephus albigularis</u>	x	x	x	x	x	x	x	x	x	x	x	x	U RE	2	F
* <u>Pyrrhurus scandens</u>	x	x	x	x	x	x	x	x	x	x	x	x	U RE	2	F
<u>Pyrrhurus flavicollis</u>	x	x	x	x							x	x	U DV?	2	SG
* <u>Pycnonotus barbatus</u>	x	x	x	x	x	x	x	x	x	x	x	x	C RE	2	F & S
* <u>Prionops plumata</u>	x	x	x	x						x	x	x	U DV	2	S
* <u>Dryoscopus gambensis</u>	x	x	x	x	x	x	x	x	x	x	x	x	U RE	1	DF
<u>Laniarius ferrugineus</u>			x					x	x	x	x	x	U RE	1	SG
* <u>Malaconotus blanchoti</u>		x	x								x		R VI	1	DF & S
* <u>Tchagra senegala</u>											x	x	R VI	1	DF & S
<u>Tchagra minuta</u>												x	R VI	1	DS
<u>Cercomela familiaris</u>	x	x	x										U VI?	1	S
* <u>Cossypha natalensis</u>		x	x	x	x	x	x			x	x	x	U RE	1	F
* <u>Cossypha niveicapilla</u>	x	x	x	x							x	x	U DV	1	F
* <u>Cossypha polioptera</u>	x	x		x	x	x				x	x	x	U RE	1	F

SPECIES	J	F	M	A	M	J	J	A	S	O	N	D	STATUS	ABUNDANCE	HABITAT
<u>Myrmecocichla</u>															
<u>cinnamomeiventris</u>	x	x	x	x		x					x	x	x	U RE	1 KH
* <u>Stiphrornis erythrothorax</u>	x	x	x	x	x	x	x	x	x	x	x	x	C RE	2	F
* <u>Turdus pelios</u>		x	x		x				x	x	x		U VI	1	F & S
* <u>Phyllanthus atripennis</u>		x			x	x	x		x	x	x	x	U RE	1	F
* <u>Trichastoma fulvescens</u>	x		x	x	x		x		x		x	x	U RE	1	F
* <u>Trichastoma puveli</u>	x	x		x		x			x		x	x	U RE	1	F
* <u>Apalis rufogularis</u>	x	x	x	x	x	x	x	x	x	x	x	x	U RE	2	F
* <u>Camaroptera chloronota</u>	x	x	x	x	x	x	x	x	x	x	x	x	C RE	2	F
<u>Camaroptera brachyura</u>			x						x	x	x	x	U VI	1	S
<u>Cisticola aberrans</u>			x	x	x	x	x	x		x		x	U RE	1	KH
<u>Cisticola juncidis</u>									x				R VI	1	DS
* <u>Cisticola lateralis</u>			x	x	x	x	x	x		x		x	U RE	1	DF
<u>Eremomela pusilla</u>			x										R VI?	1	S
<u>Hippolais pallida</u>			x										R VI?	1	S
<u>Phylloscopus trochilus</u>			x								x		R PM	1	S
<u>Phylloscopus sibilatrix</u>											x	x	R PM	1	S
<u>Sphenoeacus mentalis</u>						x	x	x	x	x	x	x	U RE	1	S
* <u>Ficedula hypoleuca</u>	x	x	x									x	U PM	1	F & S
* <u>Muscicapa striata</u>									x	x	x		U PM	1	DF & S
* <u>Fraseria ocreata</u>			x										R VI?	1	F
<u>Melaenornis edolioides</u>			x			x		x	x		x		U RE	1	S
* <u>Muscicapa epulata</u>	x	x			x	x			x	x	x		U RE	1	F
* <u>Myioparus plumbeus</u>		x	x			x		x		x	x	x	U RE	1	DF & S
* <u>Megabyas flammulata</u>	x	x	x	x	x	x	x		x		x	x	U RE	1	F
<u>Platysteira cyanea</u>		x	x	x		x	x		x	x	x		U RE	1	SG
<u>Trochocercus longicauda</u>					x								R VI	1	SG
* <u>Terpsiphone viridis</u>	x		x				x		x	x	x	x	U RE	1	F & S
<u>Parus leucomelas</u>	x					x	x		x	x			U RE	1	S
* <u>Anthreptes collaris</u>	x	x	x	x	x	x	x	x	x	x	x	x	U RE	2	F
<u>Anthreptes longuemarei</u>												x	R VI	1	SG
* <u>Nectarinia adelberti</u>	x	x		x	x						x	x	R DV?	1	DF
* <u>Nectarinia coccinigaster</u>	x	x					x		x	x	x	x	U RE?	1	F & SG
* <u>Nectarinia olivacea</u>	x	x	x	x	x	x	x	x	x	x	x	x	C RE	2	F
<u>Nectarinia senegalensis</u>			x			x							R VI	1	S
* <u>Nectarinia superba</u>			x										R VI	1	F
* <u>Nectarinia venusta</u>	x	x	x						x	x	x		U DV	1	DF & S
<u>Nectarinia verticalis</u>		x	x	x			x		x	x	x	x	U RE	1	SG
<u>Zosterops senegalensis</u>							x						R VI?	1	S
<u>Emberiza tahapisi</u>	x	x	x	x					x	x	x	x	C DV	2	KH
<u>Serinus mozambicus</u>									x				R VI?	1	S
<u>Estrilda larvata</u>									x				R VI?	1	S
* <u>Estrilda melpoda</u>		x	x	x					x				U RE?	2	DF & S
<u>Estrilda troglodytes</u>								x					R VI?	1	S
<u>Lagonosticta rubricata</u>		x	x	x		x			x	x	x		U RE	1	S
<u>Lagonosticta rufopicta</u>												x	R VI?	1	S
<u>Lagonosticta senegala</u>												x	R VI?	1	S
<u>Lonchura cucullata</u>	x							x					R VI?	1	S
<u>Pytilia hypogrammica</u>												x	R VI?	1	S
* <u>Spermophaga haematina</u>	x	x	x	x		x			x	x	x	x	U RE	1	F

SPECIES	J	F	M	A	M	J	J	A	S	O	N	D	STATUS	ABUNDANCE	HABITAT
<u>Petronia dentata</u>	x											x	R VI?	1	S
<u>Euplectes macrourus</u>	x						x	x					R VI?	2	S
<u>Euplectes hordeaceus</u>							x						R VI?	1	S
<u>Malimbus rubriceps</u>	x											x	R VI?	1	S
* <u>Ploceus nigricollis</u>	x	x	x		x			x	x	x	x	x	U RE	2	F & SG
<u>Quelea erythrops</u>							x						R VI?	1	S
<u>Vidua macroura</u>							x						R VI?	1	S
<u>Vidua funerea</u>								x	x	x	x	x	U RE?	1	S
* <u>Cinnyricinclus leucogaster</u>	x		x									x	R DV?	2	S
* <u>Lamprotornis splendidus</u>	x		x	x		x	x		x		x		U RE	2	F
<u>Onychognathus morio</u>	x		x			x		x	x	x	x	x	U RE	2	KH
* <u>Oriolus auratus</u>	x	x	x	x	x	x			x	x	x	x	U RE	1	F & S
* <u>Dicrurus ludwigii</u>	x	x	x	x	x	x	x	x	x	x	x	x	U RE	1	F
<u>Corvus albus</u>												x	R VI?	1	S
<u>Ptilostomus afer</u>												x	R VI?	2	S

Appendix 2 Species recorded at Sanga River and Gimi River Forest Reserves which were not recorded at Kagoro.

Butorides striatus Single bird fishing in Gimi River, 12 Jan 1980.
Egretta garzetta Single bird, Gimi River, 12 Jan 1980.
Scopus umbretta Pair roosting in tree, Gimi River, 12 Jan 1980.
Butastur rufipennis 6 attending bush fire, Sanga River, 3 Dec 1979.
Francolinus bicalcaratus 6, Gimi River, 12 Jan 1980.
Numida meleagris 50+, Gimi River, 12 Jan 1980.
Podica senegalensis Single bird, Sanga River, 22 Dec 1979.
Pluvianus aegyptiacus 3 resting on sandbar, Gimi River, 12 Jan 1980.
Vanellus albiceps 1, Gimi River, 12 Jan 1980.
Vanellus senegallus 2, Gimi River, 12 Jan 1980.
Vanellus superciliosus 3, Sanga River, 22 Dec 1979.
Tringa hypoleucos 1, Sanga River, 22 Dec 1979.
Tringa ochropus 3, Gimi River, 12 Jan 1980.
Macrodipteryx longipennis 2 males displaying, Gimi River, 12 Jan 1980.
Dicrurus adsimilis Single bird, Sanga River, 22 Dec 1979.

Appendix 3 Ringing totals, weights and wing lengths of species netted in Nindam Forest Reserve.

SPECIES	No. ringed	Weight (g)		Wing (mm)	
		\bar{x}	N	\bar{x}	N
<u>Accipiter toussenelii</u>	1	230.0	1	201.0	1
<u>Kaupifalco monogrammicus</u>	1	-	-	-	-
<u>Turtur tympanistria</u>	5	79.7	5	110.0	3
<u>Merops albicollis</u>	2	19.2	2	-	-
<u>Alcedo leucogaster</u>	12	16.0	10	56.0	11
<u>Lybius bidentatus</u>	1	79.5	1	101.0	1
<u>Pogoniulus bilineatus</u>	2	12.3	1	55.0	1

<u>Indicator maculatus</u>	1	47.0	1	103.0	1
<u>Indicator willcocksi</u>	2	16.3	1	66.5	2
<u>Campethera nivosa</u>	1	42.2	1	90.0	1
<u>Andropadus virens</u>	109	24.0	93	76.5	108
<u>Bleda canicapilla</u>	34	45.9	28	99.7	28
<u>Phyllastrephus albigularis</u>	50	male 26.0	15	81.5	15
		female 21.9	13	71.0	13
<u>Pyrrhurus scandens</u>	7	44.3	6	99.5	6
<u>Pycnonotus barbatus</u>	1	-	-	-	-
<u>Cossypha natalensis</u>	24	35.5	15	89.9	15
<u>Cossypha niveicapilla</u>	13	37.9	9	99.1	10
<u>Cossypha polioptera</u>	20	20.5	16	75.7	16
<u>Stiphrornis erythrothorax</u>	88	16.0	48	64.1	48
<u>Turdus pelios</u>	6	65.6	6	115.2	6
<u>Phyllanthus atripennis</u>	7	87.4	5	119.3	6
<u>Trichastoma fulvescens</u>	16	27.5	11	74.6	13
<u>Trichastoma puveli</u>	12	45.0	5	86.2	6
<u>Apalis rufogularis</u>	2	-	-	-	-
<u>Cisticola lateralis</u>	2	21.6	2	61.0	1
<u>Camaroptera chloronota</u>	21	10.9	10	52.9	10
<u>Terpsiphone viridis</u>	4	14.4	2	80.0	3
<u>Anthreptes collaris</u>	2	8.9	1	52.0	1
<u>Nectarinia olivacea</u>	64	10.0	36	58.9	41
<u>Ploceus nigricollis</u>	1	-	-	-	-
<u>Spermophaga haematina</u>	17	23.4	9	68.9	8
<u>Dicrurus ludwigii</u>	6	29.3	6	104.0	6

REVIEW

DER ZUG EUROPÄISCHER SINGVÖGEL. Vol. 4, by Gerhardt Zink, Universitäts-Druckerei Konstanz GmbH. Pp 146 (mainly maps). DM 76.00 . ISBN 3-9801167-3-5. 1985.

This volume deals with Ficedula hypoleuca, Motacilla alba, Bombycilla garrulus, nine species of Emberiza, and Plectrophenax nivalis and Calcarius lapponicus. As with the previous volumes, with which this one is uniform in style and format, all Palaearctic and African recoveries of ringed birds, in both directions, are mapped, with detailed commentaries in the text (in German). The space devoted to a species is in proportion with the amount of ringing activities concerned with it. Thus it takes no less than 40 maps, full-page or inset, to detail the migrations, as shown by straight lines between ringing and recovery stations, of the Pied Flycatcher Ficedula hypoleuca, distinguished according to age class, season, and several other parameters. The maps are visually lucid and easy to interpret; their scale varies with circumstance, and with so few Saharan and subsaharan recoveries of Pied Flycatchers three small partial maps of Africa suffice for it. The Pied Wagtail Motacilla alba is dealt with in 15 pages; there are numerous recoveries in North Africa (mapped with Europe) but few enough further south to require only four small maps of Africa. Several of the species discussed in this volume do not occur in Africa at all, of course.

LA STERNE CASPIENNE STERNA CASPIA PALLAS A L'INTERIEUR
DU ZAIRE

par P. Herroelen

Received 10 April 1986

Pendant mon séjour à Basankusu (19° 48'E, 01° 14'N) dans la province de l'Equateur une Sterne épuisée fut ramassée le 12 décembre 1954 par un chauffeur zaïrois sur la route tout près de Basankusu et apportée à L. Peeters qui tenait un petit commerce d'animaux et d'oiseaux africains.

Le lendemain l'oiseau mourut et me fut présenté par L. Peeters; à l'époque j'avais déterminé ce spécimen comme Sterna maxima (Schouteden 1961) en me basant uniquement sur l'aileron mesuré erronément comme 370 mm.

Récemment à la lecture des résultats de baguage de la Sterne caspienne en Afrique centrale (Glutz von Blotzheim et Bauer 1982) et des détails de la clé de détermination chez Chapin (1939) j'arrivais à la possibilité que la Sterne de 1954 devrait être une Sterna caspia.

Cette supposition fut confirmée lors d'une vérification de la peau au MRAC à Tervuren (No. 81436). Ensemble avec M. Louette nous avons réexaminé l'oiseau en question et nous l'avons également comparé avec quelques Sterna maxima provenant de la côte atlantique zaïroise.

Avant la mise en peau j'avais noté les détails suivants: poids 295 grammes (oiseau très maigre); estomac vide; iris brun foncé; bec orange, la pointe légèrement noire; tarse et doigts brun foncé noirâtre; ongles noirs. Mâle adulte, gonades en repos; voûte crânienne munie de deux petites "fenêtres". Mensurations (en mm): aileron 389, queue, rectrices médianes 100, rectrices externes 120, tarse 43.5, bec (mesuré à partir du crâne) 76, largeur à la hauteur des narines 16 mm. Absence de mue dans les ailes, la queue et les autres parties du corps.

Une deuxième preuve de la présence de la Sterne caspienne au Zaïre fut apportée par la reprise d'un oiseau bagué en Suède. L'oiseau fut tué au village Katampa Kapina, en région de Tshofa (05° 15'S, 25° 13'E), Kasai oriental le 11 décembre 1961. Il s'agit d'un oiseau de première année, bagué au nid le 1^{er} juillet 1961 dans le Uppland, Suède; distance parcourue minimum 7,300 km S (Schouteden 1966; Glutz von Blotzheim et Bauer 1982). La bague n'a pu être récupérée mais un des ailerons est conservé au MRAC à Tervuren.

La concordance des deux dates (12 décembre, 11 décembre) est remarquable. Plus d'une fois la Sterne caspienne a été trouvée loin à l'intérieur des terres (Mayaud 1956, 1958); sans doute traverse-t-elle le Sahara d'un seul trait pour aller hiverner dans les lagunes ou estuaires des grands fleuves africains (divers auteurs dans Glutz von Blotzheim et Bauer 1982).

La troisième preuve est la reprise d'un oiseau finlandais, citée ici sans date et localité précises; cette trouvaille est mentionnée par Nordstrom (1963) à la carte 21 A page 101 et dans un tableau à la page 111 comme "Rep. Kongo, 1 in November". D'après Glutz von Blotzheim et Bauer (1982) cet oiseau a été trouvé fin novembre "am Kongo/Zaire, 7000 km S".

SUMMARY

3 occurrences of Caspian Terns Sterna caspia in Zaïre are authenticated: in Dec 1954, Dec 1961, and a Finnish-ringed bird in Nov (year? - before 1963).

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P. Herroelen, Postbus 64, B-8400, Oostende, Belgium

REVIEW Cont. from p 20

Page size, 270 x 340 mm, is generous; maps, at 200 x 240 mm, include often a mass of detail but are very well printed and exceptionally clear. Most maps have no printing on the obverse side of the page. There are five introductory pages, and a 4-page unbound enclosure giving an index of the 100 songbird species covered in Vols. 1-4. The volume has a loose, enclosing card cover.

The four volumes comprise a work of great scholarship, showing at little more than a glance the totality of results of decades of bird ringing, with tens of thousands of recoveries of tens of millions of marked birds. Students of migration could now wish for two further magna opera: an update of species in earlier volumes (Vol 1, 1973), and coverage of non-passerine birds.

C.H. Fry

RECENT OBSERVATIONS OF BIRDS IN W NATIONAL PARK (NIGER)

by B. Shull, M. Grettenberger and J. Newby

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Since the publication, in 1983, by Koster and Grettenberger of a survey^{*} of the birds of Niger's sector of W National Park (Malimbus 5: 62-72), a considerable amount of new data has come to light. The present authors have identified a further 25 species (Appendix I), bringing the grand total for the park to 308. Amongst the sightings, that of the Finfoot (Podica senegalensis: Heliornithidae) brings a new family to the park's avifauna. We also include here additional month records for a further 101 species (Appendix II).

We should like to take this opportunity of stressing our concern for the future of W National Park, and in particular of its unique gallery forest habitats, which are so important for many of the park's breeding birds. W National Park encloses Niger's last remaining stands of forest of any importance and they are today threatened by the construction of dams on both the Niger and Mekrou rivers. The latter project, if implemented, would guarantee the destruction of most of W's remaining gallery forest. Habitats on the park's other main watercourse, the Tapoa river, are also threatened by the exploitation of phosphates lying nearby. Both dam and phosphate projects are progressing and unless pressure is brought to bear on the government and the projects' financiers (World Bank, United States Agency for International Development amongst others) the 'heart' of the park will be irrevocably destroyed.

B. Shull, M. Grettenberger and J. Newby

WWF Representation to Niger, B.P. 10933, Niamey, Republic of Niger

APPENDIX I: NEW BIRD SPECIES FOR W NATIONAL PARK (NIGER)

	<u>Months</u>		<u>Months</u>
<u>Plegadis falcinellus</u>	Mar	<u>Apus apus</u>	Aug
<u>Aegyptius tracheliotus</u>	Aug Nov (breeding) Feb	<u>Apus caffer</u>	Oct Nov
<u>Gyps fulvus</u>	Nov	<u>Merops superciliosus</u>	Mar
<u>Neophron percnopterus</u>	Jan Mar	<u>Mirafraga nigricans</u>	Oct
<u>Hieraaetus africanus</u>	June July Sept	<u>Eremopterix nigriceps</u>	Oct Nov Dec
<u>Pernis apivorus</u>	Jan Feb May	<u>Delichon urbica</u>	Oct
<u>Pandion haliaetus</u>	Jan Nov	<u>Lanius excubitor</u>	Feb
<u>Podica senegalensis</u>	Aug Oct	<u>Lanius senator</u>	Nov
<u>Sterna nilotica</u>	Mar Apr	<u>Spreo pulcher</u>	Dec
<u>Sterna caspia</u>	Mar	<u>Malimbus nitens</u>	Aug
<u>Clamator glandarius</u>	Nov	<u>Quelea erythrops</u>	June Sept
<u>Ceuthmochares aereus</u>	Apr May	<u>Euplectes afer</u>	Dec
		<u>Lonchura cucullata</u>	Dec

* Errata

Cursorius temminckii: transpose to follow C. chalcopterus and add Nov (Tapoa R.).

Caprimulgus climacurus: replace July with June and Feb with Jan.

Plocepasser superciliosus: add Mekrou R. and Woodland.

APPENDIX II: NEW MONTH RECORDS FOR W NATIONAL PARK

	<u>Months</u>		<u>Months</u>
<i>Pelecanus rufescens</i>	Mar	<i>Caprimulgus inornatus</i>	Mar
<i>Phalacrocorax africanus</i>	July Aug	<i>Macrodipteryx longipennis</i>	Dec
<i>Ardea purpurea</i>	May July Aug	<i>Apus affinis</i>	July
<i>Ardea melanocephala</i>	Feb Mar July	<i>Phoeniculus aterrimus</i>	Oct Nov Dec
<i>Egretta intermedia</i>	Feb Apr	<i>Merops nubicus</i>	Aug Sept
<i>Egretta garzetta</i>	Aug	<i>Merops albicollis</i>	Sept Oct
<i>Ardeola ralloides</i>	July Aug	<i>Merops pusillus</i>	June Nov
<i>Ciconia episcopus</i>	May	<i>Lybius dubius</i>	Mar Apr May
<i>Ciconia abdimii</i>	Aug Oct	<i>Indicator minor</i>	Nov
<i>Leptoptilos crumeniferus</i>	Nov-Jan(nesting)	<i>Eremopterix leucotis</i>	Apr
<i>Threskiornis aethiopicus</i>	Apr	<i>Motacilla flava</i>	Dec
<i>Plectropterus gambensis</i>	Jan Feb	<i>Muscicapa cassini</i>	Aug
<i>Nettion auritus</i>	June Sept	<i>Batis senegalensis</i>	Apr
<i>Falco tinnunculus</i>	Jan Nov	<i>Platysteira cyanea</i>	Oct
<i>Falco chiquera</i>	Feb Dec	<i>Trochocercus longicauda</i>	June
<i>Hieraaetus spilogaster</i>	Apr Dec	<i>Oenanthe hispanica</i>	Oct Nov Dec Mar
<i>Aquila rapax</i>	July Oct Nov	<i>Myrmecocichla aethiops</i>	Apr
<i>Aquila wahlbergi</i>	July	<i>Luscinia megarhynchos</i>	Dec
<i>Elanus riocourii</i>	Jan Dec	<i>Phoenicurus phoenicurus</i>	Mar
<i>Elanus caeruleus</i>	Feb Mar	<i>Cercotrichas podobe</i>	Apr Aug
<i>Polemaetus bellicosus</i>	May Oct	<i>Turdus pelios</i>	June Aug
<i>Butastur rufipennis</i>	Jan	<i>Acrocephalus schoenobaenus</i>	Dec
<i>Circaetus gallicus</i>	Apr	<i>Cisticola cantans</i>	Feb Sept
<i>Circaetus cinereus</i>	Apr May Oct Dec	<i>Sylvietta brachyura</i>	Oct Dec
<i>Melierax metabates</i>	Nov Dec	<i>Hypergerus atriceps</i>	Nov
<i>Terathopius ecaudatus</i>	Feb (breeding)	<i>Prinia subflava</i>	Mar Apr July
<i>Polyboroides radiatus</i>	Nov Dec Mar Apr		Oct Nov Dec
<i>Circus macrourus</i>	Oct Nov Dec	<i>Hirundo rustica</i>	Oct
<i>Gallinula angulata</i>	Nov	<i>Hirundo leucosoma</i>	Nov
<i>Balearica pavonica</i>	Apr	<i>Hirundo senegalensis</i>	Mar July
<i>Otis arabs</i>	Nov	<i>Riparia paludicola</i>	Feb Oct Dec
<i>Eupodotis senegalensis</i>	Mar	<i>Dryoscopus gambensis</i>	Oct
<i>Burhinus senegalensis</i>	Aug	<i>Campephaga phoenicea</i>	Sept
<i>Burhinus vermiculatus</i>	May	<i>Parus leucomelas</i>	July
<i>Burhinus capensis</i>	Apr	<i>Corvus albus</i>	Apr
<i>Vanellus spinosus</i>	June Oct	<i>Ptilostomus afer</i>	Apr
<i>Vanellus tectus</i>	Oct	<i>Lamprotorornis purpureus</i>	June
<i>Vanellus albiceps</i>	Oct	<i>Nectarinia cuprea</i>	Jan
<i>Tringa ochropus</i>	Mar Nov	<i>Nectarinia senegalensis</i>	Apr Sept
<i>Tringa hypoleucos</i>	Aug	<i>Anthreptes platyrus</i>	Oct
<i>Tringa glareola</i>	Jan Dec	<i>Emberiza flaviventris</i>	Dec
<i>Himantopus himantopus</i>	Feb Nov	<i>Emberiza forbesi</i>	May
<i>Glareola cinerea</i>	Apr	<i>Ploceus luteolus</i>	Oct May
<i>Larus cirrhocephalus</i>	Apr May June	<i>Ploceus heuglini</i>	Aug
<i>Sterna albifrons</i>	Mar	<i>Ploceus cucullatus</i>	May
<i>Rhynchops flavirostris</i>	Mar	<i>Vidua funerea</i>	Mar
<i>Pterocles exustus</i>	June	<i>Vidua macroura</i>	Aug
<i>Streptopelia roseogrisea</i>	Aug Oct	<i>Vidua orientalis</i>	Feb Aug
<i>Clamator levaillantii</i>	Aug	<i>Vidua chalybeata</i>	Jun Aug Oct
<i>Cuculus canorus</i>	Apr	<i>Quelea quelea</i>	Feb Mar Oct
<i>Centropus senegalensis</i>	Nov	<i>Pytilia melba</i>	Oct

REVISED LIST OF SOUND-RECORDED AFROTROPICAL BIRDS

by C. Chappuis

Received 10 January 1986

The first list of sound-recorded Ethiopian (Afrotropical) birds (Chappuis 1980) permits those interested in resident and visiting birds in Africa easily to locate acoustic references for the large majority of species (about 1400 species out of c. 1900). Since then much new information, often concerning acoustically ill-known species, has appeared: 2191 new references embrace 1141 recordist-references and 1050 disc/cassette references. These data are too numerous to cite in their entirety (particularly concerning common species already dealt with by Chappuis 1980). I have therefore not made a complete revision of the previous list; but give below a complementary list, drawn up according to the following criteria:

- Species not previously recorded: all references are cited.
- Species with 5 disc/cassette references: no further citations given.
- Species with < 5 five disc/cassette references: only new recordings (and holding institutions) are given.
- Species with < 5 references in total: all new references are given (publications, institutions, recordists).

As before, systematic sequence is that of Mackworth-Praed & Grant (1970-1973), with the nomenclature of The Birds of Africa, where different, in parenthesis. For each species the sequence of references is (i) Institution (BBC, BLOWS, COR, FITZ), (ii) published discs or cassettes, and (iii) Recordists, as follows:

(i) BBC: Natural History Unit, Broadcasting House, Whiteladies Road, Bristol BS8 2LR, UK

BLOWS: British Library of Wildlife Sounds, The British Library, National Sound Archive, 29 Exhibition Road, London SW7 2AS, UK

COR: Library of Natural Sounds, Laboratory of Ornithology, Cornell University, 159 Sapsucker Woods Road, Ithaca, NY 14850, USA

FITZ: Fitzpatrick Bird Communications Library, Bird Department, Transvaal Museum, PO Box 413, Pretoria 0001, South Africa

(ii) List of discs/cassettes including Afrotropical species (continuation of list in Chappuis 1980)

- 59 - NICOLAI, J. (1965) see no. 501 Malimbus 1980.
- 60 - ROCHE, J.C. (1968) Guide sonore des Oiseaux d'Europe, Tome II: Maghreb. Five 17 cm 33 1/3 rpm mono discs. Distribution: EDWARDS RECORDS, 58, rue du Docteur Calmette, 59320 SEQUEDIN. France. Disc 1, one species.
- 61 - SLATER, A. and SLATER, D. (1970) Bird Chorus on the Limpopo. One 30 cm 33 1/3 rpm disc. No. BS 001. Privately published by A.V. SLATER 309th Street, PARKHURST 2193. JOHANNESBURG SA. 12 species.
- 62 - PALMER, S. and BOSWALL, J. (1969 - 1972) A Field Guide to the Bird Songs of Britain and Europe. Twelve 12-inch 33 1/3 rpm discs. RFLP 500 1-5012. SR Records. Swedish Broadcasting Corporation; 105 10 STOCKHOLM, Sweden
- 63 - PALMER, S. and BOSWALL, J. (1973) See no. 502 Malimbus 1980.
- 64 - HAYES, J. and ALLAN, J.O. See no. 503 Malimbus 1980.
- 65 - JELLIS, R. (1977) Bird Sounds and their Meaning. One 30 cm 1/3 rpm disc. BBC OP 224. British Broadcasting Corporation, 35 Marylebone High Street, London W1M 4AA. 2 species.
- 66 - KABAYA, T. (1978) Birds of the World. I Africa. One 30 cm 33 1/3 rpm stereo disc. King Records SKS (H) 2007. King Records Co, Japon. 20 birds.
- 67 - MARSHALL, J.T. (1978) See no. 505 Malimbus 1980.
- 68 - CHAPPUIS, C. (1979) See no. 504 Malimbus 1980.
- 69 - WALKER, A. (1980) Sounds of the Zimbabwe bush. One stereo cassette. Queen Victoria Museum, Harare, ZIMBABWE, or A. WALKER, 1 Northmoor Road, Oxford OX2 6UW. 27 species.
- 70 - PALMER, S. and BOSWALL, J. (1980) A field guide to the bird songs Britain and Europe. One 12-inch 33 1/3 rpm disc. RFLP 5015. SR Records. Swedish Broadcasting Corporation, 105 10 STOCKHOLM, Sweden.
- 71 - CHAPPUIS, C. (1981) Les Oiseaux de l'Ouest Africain. disc 12, Caprimulgidae, Trogonidae, Coliidae, Capitonidae, Indicatoridae. One 30 cm 33 1/3 rpm mono disc. ALA 23 and 24 with Alauda V 49, No. 1. Societe d'Etudes Ornithologiques, 46, rue d'Ulm, 75230 PARIS. 48 species.
- 72 - AUDIO THREE (1981) Bird calls. Three cassettes, Vol. I, II, III. 6 Larch Road, DURBAN, R.S.A. 4001. 217 species.

- 73 - PALMER, S. and BOSWALL, J. (1981) A field guide to the bird songs Britain and Europe. Sixteen cassettes 5021 to 5036. SR Records. Swedish Broadcasting Corporation, 105 10 STOCKHOM, Sweden.
- 74 - GILLARD, L. and GIBBON, G. (1982) A field guide to the bird calls of Southern Africa. Two cassettes (Tapes 1 and 2). Gillard and Gibbon, P.O. Box 394. GREENSIDE 2034 JOHANNESBURG or P.O. Box 10123, ASHWOOD 3600 PINETOWN. About 420 species.
- 75 - AUDIO THREE. Bird calls: Bird families, Vol. IV. 2 cassettes. 6 Larch Road, DURBAN 4001 R S A.
- 76 - CHAPPUIS, C. (1984) Oiseaux migrateurs et gibier d'eau en Hiver - Water fowl and Waders in Winter. One cassette. Obtainable from C. Chappuis, Lot. Fer a Cheval, LA BOUILLE, 76530 Grant Couronne, France.
- 77 - GILLARD, L. (1984) Southern african Bird Calls. Three cassettes (Part 1, 2 and 3). Gillard Bird Cassettes, P.O. Box 72059 Parkview, 2122, JOHANNESBURG, S.A. 475 species.
- 78 - CHAPPUIS, C. (1985) Les Oiseaux de l'Ouest Africain, disc ALAUDA 13 Upupidae, Phoeniculidae, Apodidae, Picidae, Pittidae, Eurylaemidae, Alaudidae and Motacillidae. One 30 cm 33 1/3 rpm mono disc. ALA 25 and 26 with Alauda V 53 No. 2. Societe d'Etudes Ornithologiques 46, rue d'Ulm, 75230 PARIS. 65 species.
- 79 - GILLARD, L. (1985) Southern African Bird Calls, revised and enlarged Edition. Three cassettes (Part 1, 2 and 3). Gillard Bird cassettes, P.O. Box 72059 Parkview, 2122, JOHANNESBURG, S.A. Plus de 500 especes. Par rapport au No. 77: 34 nouvelles espèces, 78 espèces revues ou augmentées.
- 80 - REUCASSEL, D. (1984) Selected South African Bird Calls. One cassette. P.O. Box 11327, JOHANNESBURG 2000, S.A. 141 species.
- 81 - GIBBON, G. (1984) Common Bird Calls of Southern Africa. One cassette. P.O. Box 10123, ASHWOOD 3605, S.A. 177 species.
- 82 - NORTH, M.E.W. and SIMMS, E. (1959) Witherby's Sound Guide to British Birds. Thirteen 25 cm. 78 rpm mono HFG 1-13. H.F. & G. Witherby, London. Note: re-issued in 1969 as two 30 cm 33 rpm EAS 001/2 and EAS 003/4. 4 species.
- 83 - MORRIS, J. (1969) Animal Magic. 30 cm 33 rpm mono BBC ROUNDABOUT 4 BBC Records, London. 3 species.
- 84 - ANON (1970) Animal Sounds - Birds. 17 cm 33 rpm mono PC 045/6. Produced by Procaudio Ltd for BPC Publishing Ltd, London. 1 species.
- 85 - RICCI, S. (1979) Bruits et ambiance d'Afrique. One 17 cm, 45 rpm mono, No. OCR 23. Office de coopération radiophonique, PARIS. 3 species.

(iii) List of recordists with published discs/cassettes or with unpublished recordings in institutions or private collections.

ADE	ADENDORFF G.	KAB	KABAYA T.
ALL	ALLAN J.O.	KAE J.	KAESTNER J. CORNELL
ANO	ANON	KAE P.	KAESTNER P. CORNELL
ARM	ARMSTRONG E.A.	KEIB	KEIBEL W.D.
ASP	ASPINWALL D.R.	KEI	KEITH G.S. CORNELL
ATT	ATTENBOROUGH D. (BBC) BLOWS	KER	KER A.
BEA	BEAMISH H.H.	KIN	KING B.
BEL	BELL FAIRFAX BLOWS	KOC	KOCH L.
BER	BERRY H.H.	KON	KONIG C.
BIR	BIRD L.	LEMA	LE MAHO Y.
BLE	BLENCOWE Miss E.J.	LEM	LEMAIRE F.
BOS	BOSTON (BBC) BLOWS	LER	LERNOUD J.M.
BOU	BOULTON R. CORNELL	LIV	LIVERSIDGE R. CORNELL
BOUR	BOURGUIGNON C.	LOW	LOW G.C. BLOWS
BRO	BROEKHUYSEN	LUT	LUTGENS H. BLOWS
BRU	BRUNEL J.	McCHE	McCHESNEY D. CORNELL
CAR	CARNOCHAN J.	McVIC	McVICKER R.
CHA	CHAPPUIS C.	MAR	MARTIN R.B.
COW	COWLES R.B.	MAG	MARTIN GAUNTLET F. BLOWS
CRO	CROOK J.H.	MEES	MEES V. BLOWS
DAN	DANGERFIELD G.	MOR	MOREL G.
DESP	DESPIN B.	MOY	MOYER D.
DOW	DOWNEY S.P.	NEA	NEAL (BBC) BLOWS
DUN	DUNNING S.	NIC	NICOLAI J.
DUV	DUVAL C.T. BLOWS	NIG	NIGHTINGALE T.
DYE	DYER M.	NIV	NIVEN P.
ELD	ELDERS D.	NOR	NORTH M.E.W. BLOWS, CORNELL
ELG	ELGOOD J.H.	OAT	OATLEY T.B.
ERA	ERARD C.	PARE	PARELIUS D.
FAR	FARKAS T.	PAR	PARKER T. CORNELL
FIS	FISHER (BBC) BLOWS	PAY	PAYNE R.B.
FOR	FORBES-WATSON A.	PET	PETERSEN H.
FOS	FOSTER B.	POO	POOLEY T.
GAM	GAMBLE K.	QUE	QUEENY E.M.
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GI	GILL F.	ROC	ROCHE J.C.
GIL	GILLARD L.	ROO	ROOT A.
GOR	GORIUP P.	ROS	ROSE M.E.
GREG	GREGORY A.R.	SEE	SEED F.
GRI	GRIMES L. BLOWS	SES	SESSIONS P.H.B.
GUN	GUNN W.W.H.	SHO	SHORT L.
GUT	GUTTINGER H.R.	SIM	SIMMS E.
HA	HAAGNER C.H.	SLA A.	SLATER A.
HAR	HART S.	SLA D.	SLATER D.
HAY C.	HAYES C.	SM	SMITH (BBC) BLOWS
HAY J.	HAYES J. (BBC) BLOWS	SMI	SMITHERS R.H.W.
HEL	HELB H.W.	SNO	SNOW D.
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HOR	HORNE J.	STA	STANNARD J.
HOW	HOWELL T.R.	STJ	STJERNSTEDT R. BLOWS
JOHN	JOHNSON E.D.H. BLOWS	STR	STRINATI P.
JON	JONES B.	SWA	SWALES M.K.
JOUV	JOUVENTIN P.	THO	THORPE W.H.

TIB	TIBBLES M. (BBC) BLOWS	WALK	WALKER A.
TOL	TOLLU B.	WAT	WATTS D.E.
TUR	TURNER D.	WOR	WORMAN D.
VIEL	VIELLIARD J.	ZIM	ZIMMERMANN D. and M.
VOIS	VOISIN J.F.	ZIN	ZINO A.

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Ispidina picta BBC, COR. 77. GIB, HOR.
Halcyon leucocephala 74.
 " albiventris 72. 74. 75. 81.
 " malimbicus 34.
 " chelicuti 34. 35. 69. 72. 74. 75. 81.
 " senegaloides 79. HOR.

MEROPIDAE

" nubicoïdes 74. DUV, LEM.
Melittophagus pusillus (Merops pusillus) FITZ.
 74.
 " oreobates (Merops oreobates)
 HOR, STJ.
 " variegatus (Merops variegatus)
 COR. HOR, KEI, STJ.
 " bullockoides (Merops bullockoi-
 des) 74.
Dicrocercus hirundineus 74.

BUCEROTIDAE

Bycanistes albotibialis (Bycanistes cylindricus)
 FITZ.

" brevis BBC. 74.
 " fistulator FITZ.
 " cylindricus COR, FITZ.
Tropicranus albocristatus BBC.
Tockus pallidirostris FITZ. CHA, LEM.
 " hemprichii FITZ. HOR, Mc VIC.
 " bradfieldi FITZ. 77. CHA, GIB, STJ.
 " monteiri 77. GIB, GIL.
Bucorvus abyssinicus BBC, FITZ. HOR.

UPUVIDAE

Upupa epops 61. 62. 69. 74. 78.
 " africana (Upupa epops) BBC. 20. 72. 81.

PHOENICULIDAE

Phoeniculus bollei 78
 " damarensis GIB, Mc VIC.
Scoptelus aterrimus 78
 " castaneiceps 78
Rhinopomastus cyanomelas 74. 81.

STRIGIDAE

Ivyto alba 62. 73. 74.
 " capensis GILB.

Strix butleri KIN.
Otus brucei KIN.
Otus scops FITZ. 35. 62. 72. 75. 81.
 " leucotis 74.
 " rutila COR. 67.
Glaucidium capense FITZ. 74.
 " tephronotum COR, FITZ. Mc VIC.
 " sjöstedti 57.
Bubo capensis FITZ. 74.
 " lacteus 35.74.
Scotopelia bouvieri 57. DYE.

CAPRIMULGIDAE

Caprimulgus europaeus 6Z. 71. 73.
 " fraenatus 71. CHA, KEI, Mc VIC.
 " poliocephalus BBC, FITZ. 71.
 " ruwenzorii 71.
 " tristigma 71. 74. 81.
 " rufigena 71. 74. 81.
 " natalensis FITZ. 71. 74.
 " fossii 71. 72. 74. 75. 81.
 " donaldsoni FITZ. 71.
 " nubicus FITZ. 71. KIN.
 " aeqvptius 62. 71. 73.
 " eximius 71.
 " ruficollis 62. 71. 73.
Macrodipteryx longipennis 71.
Semeiophorus vexillarius (Macrodipteryx vexil-
 larius) FITZ. 71. 79.
Scotornis climacurus (Caprimulgus climacurus)
 FITZ. 71. HOR.
Caprimulgus clarus FITZ. 34. 71.

COLIIDAE

Colius striatus 71. 72. 74. 81.
 " colius FITZ. 74. GIB.
 " indicus 74. 81.
 " macrourus 71.
 " leucocephalus Mc VIC.

TROGONIDAE

Apaloderma aequatoriale 71.
Heterotrogon vitatus (Apaloderma vitatus) FITZ.
 71.

CAPITONIDAE

Lybius bidentatus 71. HOR.

" leucocephalus 71. HOR.

" minor MOY.

" chaplini CHA.

" melanopterus HOR.

" guifsohalito HOR.

" vieilloti 71.

" rubrifacies HOR.

" dubius 71.

Tricholaema hirsutum (Lybius hirsutum) COR.

71. HOR, Mc VIC.

" leucomelas (Lybius leucomelas)

BBC. 72. 74. 75. 81.

" diadematum (Lybius diadematum)

CHA, HOR.

" frontatus (Lybius frontatus) CHA,

HOR, MOY.

" flavipunctatum 71. CHA. Mc VIC ?

Gymnobucco calvus 71.

" bonapartei 71.

" peii 71.

Bucanodon whytii (Stactolaema whytii) STJ.

" leucotis (Stactolaema leucotis)

72. 74. GIB, HOR, Mc VIC.

" olivaceum (Pogoniulus olivaceus)

74.

" duchailloi (Pogoniulus duchailloi)

COR. 71. HOR, Mc VIC.

Viridibucco leucomystax (Pogoniulus leucomystax)

71.

" coryphaea (Pogoniulus coryphaea)

71. HOR

Pogoniulus chrysoconus 71. 74. 81.

" leucolaima 71.

" scolopaceus 71.

" atro-flavus 71.

" subulphureus 71. BRU, ERA.

Trachyphonus margaritatus 71.

Trachylaemus purpuratus 71.

INDICATORIDAE

Indicator variegatus 74.

" minor 71. 74.

" exilis FITZ. 71. HOR.

" willcocksii 71. BRU.

" narokensis HOR.

" conirostris 71. CHA, Mc VIC.

Prodotiscus regulus FITZ. 79. GIL, ROC.

" insignis HOR.

Melignomon zenkeri HOR.

Melichneutes robustus 71.

PICIDAE

Geocolaptes olivaceus 72. 74. GIB, SHO.

Campethera permista (Campethera caillautii per-

mista) 78. HOR.

" caroli 78. HOR.

" nivosa 78. HOR.

" bennettii 74. CHA, GIB, HOR, STJ.

" abingoni 74. 78. 81. CHA, GIB,

HOR, LEM, Mc VIC, STJ.

" cailliautii (Campethera cailliautii

fulleborni) 78. HOR, Mc VIC.

" notata HOR.

" punctuligera COR. 78.

" maculosa 78.

Dendropicos fuscescens 74. 78. 81.

" elachus 78. MOR.

" poecilolaemus 78. CHA.

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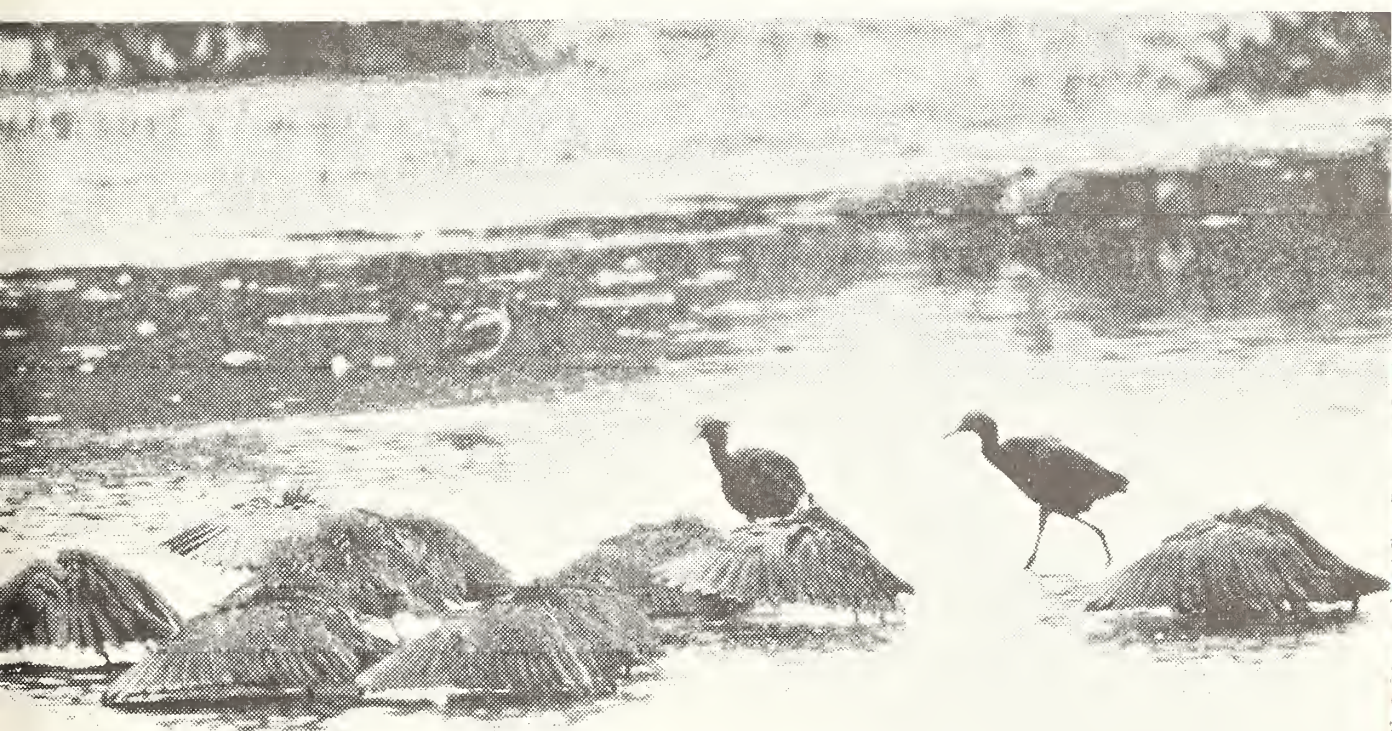
Ipophilus stierlingi (Dendropicos stierlingi)
CHA, HOR, STJ.
" obsoletus (Picoïdes obsoletus) Mc VIC.
Mesopicos goertae (Dendropicos goertae) 78.
" griseocephalus (Dendropicos griseocephalus) COR. GIB, HOR, LEM, MOY. 74.
" xantholophus (Dendropicos xantholophus) COR. 78. HOR.
" pyrrhogaster (Dendropicos pyrrhogaster) 78.
Verreauxia africana (Sasia africana) 78.
Jynx torquilla 78.
" ruficollis 74. 78. 81.

PODIDAE

Apus apus 62. 78.
" barbatus FITZ. 74. 78. GIB. LEM. STJ.
" pallidus 62. 78.
" myoptilus (Schoutedenapus myoptilus) LEM.
" melba (Tachymarptis melba) FITZ. 78. 79. GIB. GL.
" aequatorialis (Tachymarptis aequatorialis) STJ.
" bradfieldi GIB.
" affinis FITZ. 63. 73. 74. 78. 81.
" caffer 78
" horus FITZ. 77. 78. STJ.
" niansae Mc VIC.
Cypsiurus parvus 78. 79. GIB, HOR, Mc VIC.
Telacanthura ussheri 78.
" melanopygia (Chaetura melanopygia) 78.
Neafrapus cassini 78.
Chaetura sabini (Raphidura sabini) 78.

EURYLAIMIDAE

Smithornis capensis 72. 74. 78.
" rufolateralis 78.
" sharpei 78.
(To be continued.)



Black Herons Egretta ardesiaca, The Gambia. Photo: Michael Gore

THE 'HEAD-DIP AND FLUTTER' DISPLAY OF RED-THROATED BEE-EATERS
MEROPS BULLOCKI

by H.Q.P. Crick

Received 29 January 1986

INTRODUCTION

When a mated pair or a trio (mated pair plus helper) of Red-throated Bee-eaters Merops bullocki alight at the entrance to their nest-tunnel, they usually perform an excited trilling and greeting display (Fry 1973). They also perform a 'head-dip and flutter' display which has been briefly described by Fry (1984) after my own unpublished observations (Crick 1984). Here I give a more detailed description of the display and of the circumstances in which it occurs.

METHODS

Observations of Red-throated Bee-eaters, were made during a three-year study of their ecology and behaviour, from 1978 to 1981, in Yankari Game Reserve, Bauchi State, Nigeria (10°30'E, 9°45'N). Colonies of nesting bee-eaters were watched from hides placed 5-20 m distant. Many of the bee-eaters at the colony sites were individually marked with brightly-coloured plastic colours (Crick 1984).

THE DISPLAY

The 'head-dip and flutter display' was first noticed at an unusual flat ground colony in Yankari (described by Crick & Fry 1980), and was subsequently observed at other colonies set in vertical cliffs. It may be derived from the normal greeting display often given by bee-eaters when perched in front of their nests; an example of greeting is described in the following extract from my note-books:

"Two birds on the ground faced each other obliquely, tails spread, heads raised at 45°, chin feathers puffed out, wings slightly spread and vibrated, calling 'tew tew tewtewtewtewtew turre turre turre turre', rising in pitch after the first few phonemes and falling slightly at the end."

The 'head-dip and flutter' display was often accompanied with a shortened version of the greeting call:

"a bee-eater in front of its nest puts its head briefly into the entrance and pulls it out again (the 'head-dip'), then usually calls 'turr turr turr turre turre turre' while vibrating its tail, and just before or just as the call ends it makes a little fluttering flight up to 20 cm away from its nest entrance, re-lands at the nest, spreading and vibrating the tail, and head-dips again."

The number of head-dips and the length of the call is variable within the sequence.

CIRCUMSTANCES OF THE DISPLAY

The 'head-dip and flutter' display was seen most often during nest excavation and the period before egg-laying. Although enumeration of its occurrences was not attempted, the display appeared to be given in three different situations: (i) as a modified greeting ceremony when members of a pair or trio were crowded at the entrance to their nest; (ii) as a stimulus to another bee-eater to enter the nest; (iii) as a stimulus for the departure of a bee-eater from inside the nest. A further extract from my notes illustrates such situations (in this extract, birds A and B are the occupiers of nest N-1):

"08.14 hrs: A and B landed at N-1, they called trills and A fluttered in the air a couple of times, then B entered the hole. About 30 s later, B came out head first, A and B trilled vociferously, A retreated and B re-entered N-1. A then flew up ... above the holes. 08.16 hrs: A jumped down to N-1 and called. B reappeared out of the hole ... A again fluttered a little and put its head in the hole for 2-3 s. It retreated and B entered. A then flew up above N-1 again."

DISCUSSION

At vertical cliffs, where Red-throated Bee-eaters usually nest, a 'flutter' away from a nest entrance appears to be the only way for a bird to make space for its partner to head-dip or enter its nest. But on flat ground, it would be easy just to take a couple of steps sideways and, in fact, that is what happens later in the season when bee-eaters are feeding nestlings. Since the flutter element of the display occurred at the flat ground colony, it was inferred that it was part of a ritualised display. The occurrence of a flat ground colony site allowed the serendipitous discovery of this display.

It can be speculated that the 'head-dip and flutter' display evolved from intention movements to enter the nest, combined with a flight away from the nest entrance to allow another bee-eater access, and with the incorporation of elements of the greeting display. Although elements of the display can occur separately, 'head-dip and fluttering' combines them in a partly ritualised manner and appears to occur in predictable social situations.

ACKNOWLEDGEMENTS

This study was part of a Natural Environment Research Council studentship supervised by C.H. Fry. Thanks are also due to P.J. Marshall, R. Wilkinson and C.A. Galbraith.

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H.Q.P. Crick, Aberdeen University, Zoology Department, Culterty Field Station, Newburgh, Ellon, Aberdeenshire AB4 0AA, UK.

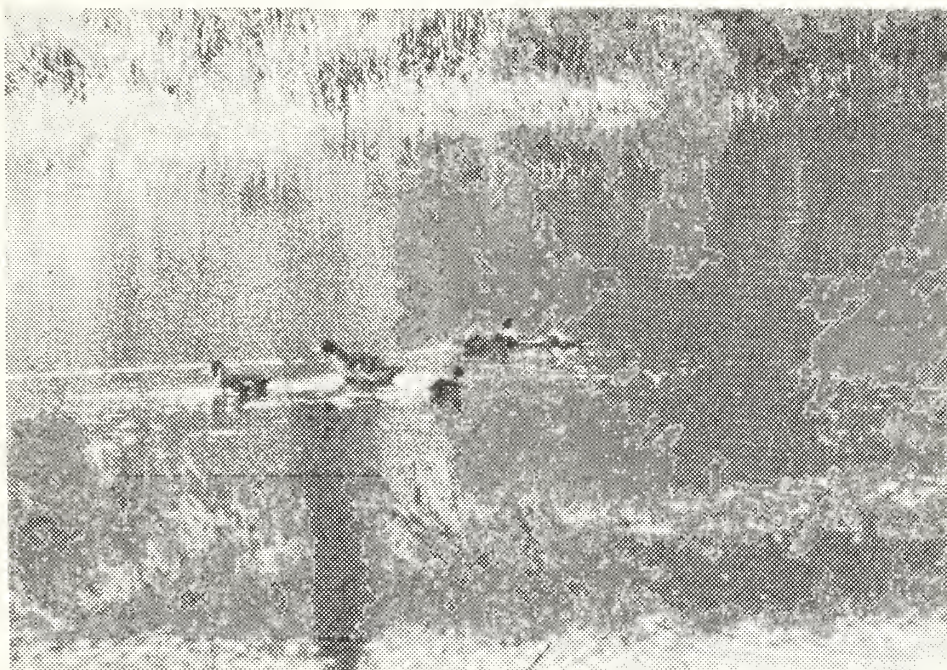
REVIEW

A DELIGHT OF OWLS: AFRICAN OWLS OBSERVED by Peter Steyn, 1984, David Philip, Cape Town & Johannesburg and Tanager Books, Dover, New Hampshire. Pp 159, 24 colour plates and numerous black-and-white photographs. £18.55p. ISBN 0-88072-063-8 (Tanager Books).

If Peter Steyn is not Africa's foremost bird photographer he must be a very strong contender for the title. That is particularly true for owls, and diurnal birds of prey, with which he has cornered the market. He is rightly well known for his photographic studies of numerous other birds also; but his owls are peerless. In addition, what sets Steyn apart from practically all top-flight nature photographers in Africa is the consummate skill with which he complements the pictorial record with other field observations. I dare say, in fact, that he would prefer recognition as an ornithologist, naturalist and scientist, rather than as a wildlife photographer.

The photographs are simply magnificent studies of a dozen species of owls, and were made mostly in Zimbabwe. But the owls dealt with are all widely distributed, so the book holds far more than just southern African appeal. But widespread as they are, many of them will be barely known to most bird-watchers, and both photos and text are packed with information that readers will find excitingly new. The text is in the form of narrative essays about the 12 species: Barn, Grass, Marsh, Wood, White-faced, African Scops, Pearl-spotted, Barred, Spotted Eagle, Cape Eagle, Giant Eagle, and Pel's Fishing Owls. Owls are delightful birds, full of character and interest and biological curiosities; this is a delightful book which does them every justice, and is thus most aptly titled. It deals with little more than a third of the African owl species, in little more than a third of the continent, yet the comprehensiveness of the title is perfectly justified, for this is the first book devoted

FIRST YELLOW-BILLED DUCK RECORD FOR NIGERIA - This photograph of five Yellow-billed Ducks Anas undulata was taken by Chris Pearson on Mambilla Plateau, Nigeria, "about 1978", and was brought to my attention through the good offices of R.E. Sharland. The original is a colour print and shows clearly the bright yellow bills of all five birds, as well as other plumage features which make the identification unquestionable. The only previous West



African record is of one specimen from Vina River, Cameroon (Monard, 1951, cited by M. Louette, 1981, The Birds of Cameroon an Annotated Check-List, and mapped by Snow, 1978, An Atlas of Speciation in African Nonpasserine birds). Otherwise the species is unknown west of a line between north Ethiopia and west Angola. There are two 'good' races, differentiated on bill colour and some plumage features; but the race of the Mambilla birds cannot be safely determined from the photo. In southern Africa the species is somewhat migratory, with the most distant recovery of 1100 km; but whether the Mambilla (and Cameroon) birds are resident or migrants is open to question.

C.H. Fry

LITTLE EGRETS AND REEF HERONS HOVERING —

On 19 May 1985 I was watching a group of herons feeding quietly on a tidal mudflat in the lagoon of Abidjan. Species included Great White Egret Egretta alba (1), Yellow-billed Egret E. intermedia (2), Little Egret E. garzetta (11), Reef Heron E. gularis (13) and Grey Heron Ardea cinerea (1 imm). Suddenly a Little Egret started hovering over the shallow water of the lagoon, stabbing at small fish below. Its example was immediately followed by other Little Egrets as well as by Reef Herons. Sometimes while hovering their feet were trailing in the water and one Reef Heron even lowered itself slowly into the water, up to the belly, without touching ground. After a while up to three E. garzetta and five E. gularis were foraging this way. They were still doing so when I left half an hour later.

I pass this mudflat twice a day on my way to work for several years now and I regularly go counting and watching birds there, but it was the first and only time I observed this behaviour, so I suppose it is not common. Hancock and Kushlan (1984, The Herons Handbook) state that the feeding techniques used by the Little Egret are highly variable and they mention some often used 'active' techniques, but no mention is made of hovering. Brown, Urban and Newman (1982, The Birds of Africa, vol 1) do not mention hovering behaviour either.

Ron Demey

PNUD, 01 BP 1747, Abidjan 01, Ivory Coast

TWO NEW SPECIES FOR IVORY COAST - Since publication of J.M. Thiollay's Birds of Ivory Coast (Malimbus 7: 1-59) I have seen two new species, bringing to 685 the number of species of this country.

European Turtle-dove Streptopelia turtur

A party of about six seen in the South of Comoe National Park (near Ganse) on 10 Feb 1985 (observation made with Jan Van de Voorde).

Reichenbach's Sunbird Nectarinia reichenbachii

One near Dabou (coast) on 23 June 1985 in shrubs bordering ricefields. The bird was at exactly the same spot on three subsequent visits to the area on 30 June, 3 August and 28 September. At each visit an excellent view was obtained, the bird not being shy and sitting for long stretches on end on the same twig and always returning to it after short flights. The bright yellow of lower belly and undertail coverts was conspicuous. A sighting on 13 July 1980 in Abidjan (in some palms on the golfcourse, at that time still under construction) was almost certainly of the same species.

Ron Demey

PNUD, 01 BP 1747, Abidjan 01, Ivory Coast

JOHANNA'S SUNBIRD IN NIGERIA - Sabon Gida Akwanwe village lies in southern Gongola State, Nigeria, near the Mambilla Plateau, at 06°45'N, 11°00'E. The area is hilly (elevation c. 500 m), with large patches of lowland rain-forest interspersed with thick guinea savanna bush and plots of farmland. The village is 15 km from the Cameroun border, which here follows the upper Donga River. On 18 Sept 1985 I watched several species of forest birds there, including a Spotted Honeyguide Indicator maculatus eating caterpillars, and a male Johanna's Sunbird Nectarinia johannae. It had metallic green head, throat and back, non-metallic dark red breast, and black wings and tail. The only previous record in Nigeria was at Lagos in 1951.

H.H. Gray

PO Box 30, Wukari, Gongola, Nigeria

RINGING IN NIGERIA 1985 - No ringing was carried out in Nigeria in 1985, but six foreign-ringed birds were reported. Full details of two of these have been received (Schedule 1).

Of 38 White Storks Ciconia ciconia controlled in Nigeria since 1962, all but four were caught by trappers near Nguru using live storks as

decoys. The decoy herd was kept in the village of Margadu, on the border of Kano and Bornu States.

On 6 Nov 1985 J.S. Ash and I visited Kano State Wetland Reserve, accompanied by P. Hall (Ecologist, Bornu State), game guards, and officials from both States. We found 20 White Storks and Abdim's Storks C. abdimii, with one Cattle Egret, staked out with a large quantity of snares around them. The snares were destroyed and the birds will be kept in Maiduguri Zoo until their flight feathers have grown; when they will be released. The International Council for Bird Preservation and the Nigerian Conservation Foundation, who arranged our trip to Nigeria, were very pleased that Conservation is now being given a high priority.

On the same trip we visited Kagoro and put up nets for one night. 11 birds were controlled; the longest recovery periods are shown in Schedule 2.

Schedule 1

Night Heron Nycticorax nycticorax Ringed 3/6/84, Slavonski Brod (Hrvatska) Yugoslavia, 45°08' N, 18°01' E.
Caught on fish hook, Nguru, -/2/85
White Stork Ciconia ciconia Ringed 28/5/81, Castelo Branco, Portugal, 39°50' N, 07°11' E.

Schedule 2

Controls at Kagoro:	duration since ringed as adults*:			
Olive Sunbird <u>Cyanomitra olivacea</u>	2	years	9	months
Bluebill <u>Spermophaga haematina</u>	6	"	4	" 13 days
White-browed Robin-Chat <u>Cossypha polioptera</u>	5	"	4	" 10 "
White-bellied Kingfisher <u>Corythornis leucogaster</u>	6	"	8	" 19 "
Little Green Bulbul <u>Andropadus virens</u>	5	"	4	" 24 "
Grey-headed Bristle-Bill <u>Bleda canicapilla</u>	6	"	5	" 10 "

(*for some comparable data see D.B. Hanmer, 1985, Safring News 14: 51-60).

R.E. Sharland

REVIEW Cont. from p 42

to owls in Africa. In no way does it overlap or compete with any of the several other owl books which have appeared recently in Europe and the States; rather, it complements them. It does for owls what Steyn has already done for southern African birds of prey and Rowan for doves, parrots, louries and cuckoos, in putting them well and truly into the monographic literature and making the better appreciation of them readily available to all.

C.H. Fry

7TH PAN-AFRICAN ORNITHOLOGICAL CONGRESS

The 7th Pan-African Ornithological Congress will be held in Nairobi, Kenya from 28 August to 5 September 1988. There will be symposia, contributed papers, poster sessions, workshops, and excursions including several tied in with symposia on avifaunas of threatened forests of Kenya. One theme will be threatened Afrotropical forest avifaunas. I.C.B.P. will participate in a one full day's programme. Funding and suggestions for funding travel to the meeting, and participation of indigenous African ornithologists in it are solicited. For further information please contact D.A. Turner, P.O. Box 48019, Nairobi, Kenya, or Dr. L. Short, American Museum of Natural History, New York City, New York 10024-5192, U.S.A.

Avian physiologist Prof. Geoffrey Maloiy of the University of Nairobi is the Congress Chairman. For those wishing to contribute papers or propose symposia, the Scientific Programme Chairman is Dr. David Pearson, Dept. of Biochemistry, Univ. of Nairobi, P.O. Box 30197, Nairobi.

The weather should be ideal (cool nights in Nairobi, clear warm days). Avian habitats are nowhere more threatened than in the Afrotropics. East Africa still offers the best opportunity to view the last of the great Pleistocene world faunas. Nairobi is an international city with hotels in diverse price ranges. It is so favourably located for visiting various birds habitats that two days in the middle of the Congress will be devoted to overnight excursions. Mt. Kenya, Africa's second highest mountain, snow covered, the flamingo-famous Rift Valley lakes, various woodlands and the western forests are all but a few hours drive from Nairobi. Take advantage of this unique opportunity.

RESEARCH PROJECT: THREATS TO THE WHITE STORK ON MIGRATION

The breeding populations of the White Stork Ciconia ciconia in Germany and most other European countries have been declining heavily over the past century (in Western Germany about 80-90% (!) between 1935 and 1984). The trend is obviously towards the extinction of the populations. Habitat alterations in the breeding areas have proved to be the major reasons for this decline, but it cannot be explained by this factor alone. Carrying out very long seasonal migrations between Europe and West, East and South Africa, the White Stork also faces various threats on its migration routes in many other countries of Africa and in the Middle East, e.g. shooting, trapping, shortage of food and habitat alterations caused by desertification, overgrazing and human activities (agricultural development, pest control, building activities, road construction).

To obtain more detailed ideas of the consequences which threats to migration have for White Stork breeding populations, WWF-Germany and ICBP jointly started a two-year research project "Threats to the White Stork Ciconia ciconia on its migration routes and in its wintering areas". Aims of the project, which is financed by the Government of Schleswig-Holstein/West Germany, will be:

- to analyse factors threatening the White Stork directly and indirectly in the different countries on its migration route.

- to analyse the extent of application of biocides and their direct and indirect effects on migrating White Storks.
- to draw together a list of areas which are of major importance for migrating White Stork.
- to produce comprehensive documentation, containing results of the project and suggestions for an international conservation strategy for the White Stork.

Because of the enormous range of the area which White Storks visit on migration, it is impossible in this project to carry out field studies and detailed investigations in all and migration and wintering countries. A really comprehensive overview of the situation for the White Stork can only be obtained if many collaborators submit information and observations on threats (birds found dead, pesticides, etc.) and on the occurrence and distribution of the White Stork in Southern Europe, the Middle East and Africa. People interested in collaborating are therefore asked to contact the project leader as soon as possible for further details:

WWF-Germany/ICBP White Stork Project
Dr Holger Schulz
Am Lindenberg 1
D3331 LELM
Federal Republic of Germany.

RARE WADERS IN SUB-SAHARAN AFRICA

To obtain a better insight into the occurrence of rare waders of Nearctic and/or eastern Palaearctic origin in sub-Saharan Africa (i.e. south of 20°N), it is proposed to publish a paper in Dutch Birding summarising all records of these birds from this region up to and including 1985. Observers are requested to send full details (including photographs where possible) of all records, whether published or unpublished, to P.B. Taylor, c/o The Computer Bureau, P.O. Box 42317, Nairobi, Kenya. In particular, information on plumage and bare parts should be as detailed as possible. Reprints or photocopies of papers and notes on already published records are also welcome. All contributors will be acknowledged.

WORKING GROUP ON GRANIVOROUS BIRDS: INTECOL

Le Professeur J. Pinowski organise un Symposium sur "le rôle des oiseaux granivores dans les écosystèmes". Il avait tout d'abord été prévu que ce Symposium serait tenu lors du Congrès International d'Ecologie (Syracuse USA) le 13 août 1986, mais à la demande de nombreux ornithologues une session sera aussi organisée lors du Congrès international d'Ornithologie, Ottawa, juin 1986. Les communications faites en ces 2 différents Congrès seront réunies en un seul volume. Le Professeur Pinowski m'a par ailleurs demandé de coordonner les travaux sur les oiseaux granivores en Afrique. Si cette question vous intéresse, voulez-vous vous mettre en relation avec moi pour voir ce que nous pouvons faire ensemble. Je vous remercie d'avance de cette collaboration.

Professor J. Pinowski is organizing a symposium on the role of granivorous birds in ecosystems, at the International Ecological Congress, Syracuse, USA, on 13 August 1986. At the request of many ornithologists a similar session will also be held during the International Ornithological Congress in Ottawa in June. The proceedings of both symposia will be combined into a single published volume. African contributions will be co-ordinated by Dr M-Y. Morel (Station d'Ornithologie, B.P. 20, Richard-Toll, Senegambia) to whom prospective participants should address their intentions and any queries.

Marie-Yvonne MOREL

Steering Committee of Working Group on Granivorous Birds (Intecol)

WEST AFRICAN ORNITHOLOGICAL SOCIETY

SOCIETE D'ORNITHOLOGIE DE L'OUEST AFRICAIN

REVENUE ACCOUNT FOR THE YEAR ENDED 31st DECEMBER 1985

	1985	1984
Subscriptions received	£1396	£1393
Subscriptions in arrear (received Jan 1986)	189	-
	<hr/>	<hr/>
	1585	1393
Payments for printing, postage etc.	1562	977
	<hr/>	<hr/>
Surplus for year	£ <u>23</u>	£ <u>416</u>

BALANCE SHEET AS AT 31st DECEMBER 1985

ASSETS

Bank Balance	£ 69	£ 262
Deposit Account	900	900
Subscriptions in arrear	189	-
	<hr/>	<hr/>
	£1158	£1162
	<hr/>	<hr/>

LIABILITIES

Subscriptions in advance		£ 89	£ 116
Accumulated Funds			
Balance at 1st January 1985	£1046	630	
Surplus for year	<u>23</u>	1069	416
		<hr/>	<hr/>
		£1158	£1162
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RECOMMANDATIONS AUX AUTEURS

Malimbus publie des articles, de courtes notes, des analyses et des lettres avec illustrations. Les manuscrits doivent être dactylographiés à double interligne avec une large marge sur un seul côté de chaque page. Autant que possible, les manuscrits auront été auparavant soumis à un ornithologue ou un biologiste.

Le texte sera de nouveau dactylographié pour sa reproduction en offset, mais les figures doivent être préparées pour une reproduction directe avec possibilité d'une réduction de 20%. On se servira d'encre de Chine et d'un papier blanc de bonne qualité; on dessinera lettres et grisés avec des "Letraset" ou "Letratone" (ou équivalent).

LES CONVENTIONS pour les tableaux, les dates, les nombres, les valeurs en système métrique, les références devront être soigneusement suivies et pourront être recherchées dans ce numéro et dans les précédents. Les articles contenant de longues listes d'espèces devront être du format d'un tableau (e.g. *Malimbus* 1: 22 ou 1: 49) ou du format d'une page de textes du 1: 36 et 56 pour les textes avec de courtes observations par espèces ou du 1: 90 pour les textes plus longs.

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MALIMBUS

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Société d'Ornithologie de l'Ouest Africain



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WEST AFRICAN ORNITHOLOGICAL SOCIETY
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Correspondence should be addressed as follows:

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The Society grew out of the Nigerian Ornithologists' Society, which was founded in 1964. Its object is to promote scientific interest in the birds of West Africa and to further the region's ornithology mainly by means of the publication of its journal **Malimbus** (formerly the **Bulletin of the Nigerian Ornithologists' Society**).

Applications for membership are welcomed. Annual membership subscription rates are #6.00 for Ordinary Members and #15.00 for Corporate Members (payments may be made in # sterling or FFr for encashment in U.K. or in Nigerian N for encashment in Nigeria). Members receive **Malimbus** free of charge.

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EDITORIAL

It is with some trepidation, mingled with excitement, that I have taken over the editorship of Malimbus from Hilary Fry. A tribute to Hilary's excellent and unstinting work as editor follows and all I can say is that I hope I can fulfil the expectations of the membership and build on the solid platform laid by Hilary. In this task I shall be helped immensely by the guidance of an editorial board consisting of Gerard Morel, our vice-president, Roger Wilkinson and Bob Cheke, all of whom will be familiar to you through their writings in Malimbus and elsewhere. Each paper will be commented on by at least two of us and may be sent to another referee when specialist knowledge is required.

This particular issue is the product of an editor learning the ropes and finding new production facilities and as such, I apologise for the lateness and relatively small size. However, I have already enough papers in store to fuel further issues including ones on such subjects as Hammerkops, Turtle Doves, Acrocephalus warblers, the birds of Northern Air, reviews of recent books, as well as nearly completed checklists of the birds of Mauritania, Niger and Burkina Faso. Of course, as Hilary Fry on occasion pointed out, the success of Malimbus depends on a continuing flow of contributions from you, the ornithologists of West Africa. So keep them coming.

With the Season's Greetings.

Humphrey Crick

HILARY FRY

Clearly history does sometimes repeat itself! Long standing members of WAOS, whose membership goes back to the former Nigerian Ornithological Society, will recall that one of us paid tribute to Hilary Fry when he left Ahmadu Bello University, Zaire to take up appointment at Aberdeen University in 1967. 'N.O.S.' and its Bulletin were then quite unestablished and it was feared that the loss of 'Pooh-Bah' Hilary (as that earlier tribute called him) might sound the death-knell of the Society.

However, thanks to the efforts of John Button and Roy Parker as successive editors, the Bulletin survived and in 1974 Hilary, now well established at Aberdeen, re-assumed editorship and with the University facilities behind him, was able greatly to improve the journal's format, and the standard of articles rose correspondingly. Although the N.O.S. had acquired a set of Officers it was Hilary's untiring energy that held the Society together. With members never able to meet as a Society, the Bulletin had to appear regularly for our survival.

Then in 1978, Hilary had the brilliant idea of convening an 'African Chat' at Liverpool. Over 20 members of N.O.S. attended, and almost as many non-members interested in African

ornithology. The meeting was completely informal - no advertised programme, no listed speakers. Was it inspired by Hilary's Quaker upbringing? But this meeting led to the birth of WAOS, with its new and now internationally recognised journal Malimbus. With this bilingual journal the work of the Editor was greatly increased and it says much for Hilary's drive and leadership that the journal has included so many excellent articles from the francophone membership.

We feel that, on behalf of the Society we should congratulate Hilary on the award of a DSC Degree by Aberdeen University, for a thesis encompassing his life-time's work in African Ornithology. In recent years he has furthered his great contribution to African Ornithology with the assumption of joint editorship of 'The Birds of Africa' following the sad and sudden death of Leslie Brown. He has become the recognised authority on Coraciiform birds on a world-wide basis, culminating in his authoratitive monograph on The Bee-eaters published by T. & A.D. Poyser. Furthermore, all African Ornithologists are indebted to Hilary for his series of Coded Bibliographies of African Ornithology.

Now, sadly, history has repeated itself with Hilary's moving to pastures new with a Chair at Sultan Qaboos University, Muscat. (We understand that 3 species of Bee-easter nest, if not on the campus, at least very near to it!) On behalf of all WAOS members we wish him every success in this new venture and our good wishes are extended too to his wife Kathie. We shall hope to learn how they are faring and to see them when they come on leave.

Just as Hilary ensured that the N.O.S. Bulletin would contine when he left Nigeria for Aberdeen, by talking to John Button into becoming Editor, so now he has characteristically arranged for the continuance of Malimbus. The new Editor, Humphrey Crick, was a post-graduate student of Hilary's (working on Bee-eaters!) at Aberdeen where he contines to hold an appointment and will thus be able to continue to use the same production facilities. Moreover he is currently also working in London at The Tropical Development Research Institute which will mean that the Secretary and the Treasurer of the Society will be able to meet him relatively easily. Hilary has also arranged for Gerard Morel our vice-president, Roger Wilkinson of Chester Zoo and Bob Cheke also at TDRI to form an editorial board to assist Humphrey Crick. We wish the new Editorship well and thank them for undertaking this arduous task, on which the future of WAOS depends.

J.H. Elgood, Secretary WAOS

R.E. Sharland, Treasurer WAOS

(Founders with Hilary Fry of NOS)

RECORDS OF BIRDS SEEN IN THE REBULIC OF TOGO DURING
1984-1986

by Robert A. Cheke, J. Frank Walsh and Samuel A. Sowah

Received 1 April 1986
Revised 30 August 1986

In previous articles the senior authors have summarised their observations on birds seen in Togo between 1972 and 1983 (Cheke & Walsh 1980, 1984, Cheke 1982). Most of the records referred to northern areas and thus complemented the coastal data provided by Robinson (1972) and Browne (1980). These recent papers have extended and amplified on the data in the lists of Dekeyser (1951), De Roo *et al.* (1969, 1970, 1971, 1972) and Louette (1975), the only authors to describe substantial collections made in Togo this century. During 1984 J. F. W. (May-Aug) and R. A. C. (Aug-Oct) were again living in Lama-Kara, in the north of Togo. In March and Sept-Nov 1985 R. A. C. was based in Lome, on the coast, and also worked in forested areas in S. W. Togo. In early 1986 J. F. W. returned to Togo and added to the coastal data with observations at Lome in Feb. These visits, together with S. A. S.'s residence in Lama-Kara have provided opportunities to improve our knowledge of the Togolese avifauna and, in particular, to provide more information on forest birds and dry season visitors. During 1985 (Mar and Sept-Nov), R. A. C. made a weekly census at Lome of a 2 km stretch of beach and flooded wasteland between the Sara-Kawa Hotel and the harbour, where J. F. W. also watched on 1 & 2 Feb 1986. The area is visited by many waders and used as a roost by migrant terns.

Most of the forest birds were seen in the Badou area, adjoining the Ghanaian border in S. W. Togo, but many were also seen further north by J. F. W. and S. A. S. who concentrated on the Aledjo forest.

Nomenclature and sequence for Afrotropical species in the list below follow Hall & Moreau (1970) and Snow (1978). Species additional to our previous lists are marked with asterisks and for these birds references are given for other Togolese records, if any are known. We have also included records of interest such as observations on Palaearctic or intra-African migrants, rare species, breeding, large flocks or unusual behaviour. The coordinates of named localities are provided as an Appendix.

AREIDAE

Egretta garzetta Little Egret On 19 June 1984 10 in the Anie area. 2 at Anecho on 8 Mar 1985 and one at Lome on 31 Mar 1985 and 1-2 Feb 1986.

*E. gularis Reef Heron One at Lome on 1 & 2 Feb 1986.
Recorded by Robinson (1972) and Browne (1980).

*E. intermedia Yellow-billed Egret One near Tsevie on 8 Mar 1985 and 2 at Lama-Kara on 17 Mar 1985.

*Ardea goliath Goliath Heron One at Anecho on 8 Mar 1985.
Recorded by Millet-Horsin (1923).

SCOPIDAE

Scopus umbretta Hammerkop An active nest at 08° 25'N beside the Anie river on 19 June 1984. Pairs seen copulating at Naboulgou on 30 Aug 1984 and mobbing an Allied Hornbill Tockus fasciatus at 09° 09'N, 01° 24'E on 13 Sept 1984.

CICONIIDAE

Ephippiorhynchus senegalensis Saddlebill Stork One on the Oti flood plains, south of Sansanne-Mango on 21 Aug 1984.

Anastomus lamelligerus Openbill One 47 km north of Naboulgou on 13 May 1984.

ACCIPITRIDAE

*Circus aeruginosus Marsh Harrier Single males beside the Oti river near Sansanne-Mango on 14 Oct 1984 and near Adeta on 14 Mar 1985. Recorded by Douaud (1957) and Browne (1980).

Circaetus cinereus Brown Snake Eagle One a few km south of Dapaon on 27 Aug 1984.

C. cinerascens Smaller Banded Snake Eagle One at Mo on 27 & 28 June 1984.

*Accipiter ovampensis Ovampo Sparrowhawk one at Avetonou on 10 Oct 1985.

*A. tachiro macroselides African Goshawk One at Djodji on 26 Mar 1985. Recorded by De Roo et al. (1972).

*A. minullus erythropterus Western Little Sparrowhawk One seen in forest beside the waterfall at Kpime-Tomegbe on 3 Oct 1985. After taking off and flying, below canopy level, to another perch the hawk attracted the attention of party of 8 Tockus fasciatus which followed it, calling loudly. A single A. minullus was also seen at Djodji on 16 & 23 Oct 1985. Recorded by De Roo et al. (1969, 1971) and Browne (1980).

*Urotriorchis macrourus Long-tailed Hawk One at Djodji on 16 Oct 1985. The bird was first seen at mid-day when it glided silently past at two-thirds the height of the forest

trees. At 1630 hrs. the bird returned, being mobbed by some Pycnonotus barbatus and glided for at least 50 m without flapping its wings. The long tail may help the species to fly in this manner in search of its main prey of squirrels (Brown et al. 1982) which were abundant in the area.

Lophaetus occipitalis Long-crested Hawk Eagle One at Naboulgou on 30 Aug 1984 and at Djodji on 21 & 26 Mar & 16 Oct 1985.

*Stephanoaetus coronatus Crowned Eagle A pair soaring over the Mt Tamania area, west of Atakpame on 9 Oct 1985. Recorded by Reichenhow (1897) and Millet-Horsin (1923).

*Hieratus pennatus Booted Eagle A pale phase bird in gallery forest at 08° 39'N, 00° 42'E beside the Kpaza river, in the Fazao mountains, on 13 Sept 1984.

FALCONIDAE

Falco peregrinus Peregrine Falcon One near Hiheatro on 30 Mar 1985 and one on the beach at Lome, trying to catch waders and terns, on 27 Oct & 17 Nov 1985.

F. alopex Fox Kestrel One swooping down over the corpse of its mate, killed on the road at the Faille d'Aledjo on 28 May 1984. One bird at the same place on 17 June 1984, but not seen after this date.

*F. tinnunculus rufescens West African Kestrel A pair observed at Badou from 22 to 29 Mar 1985. They rested next to a large nest of sticks in a tall tree; but they were never seen to enter the nest, the ownership of which remained unknown. One seen catching a lizard. The birds were absent from the site in Oct 1985.

GRUIDAE

Balearica pavonina Crowned Crane Two on flood plains beside the Oti river near Sansanne-Mango on 14 Oct 1984.

HAEMATOPODIDAE

*Haematopus ostralegus Oystercatcher One on the beach at Lome on 17 Nov 1985.

CHARADRIIDAE

Vanellus spinosus Spur-winged Plover A pair beside the Oti river near Sansanne-Mango on 21 & 27 Aug 1984.

*Charadrius dubius Little Ringed Plover One at Lome on 11

Mar 1985. Recorded by Browne (1980) and a bird ringed as a pullus in Nottinghamshire was recovered near Lome on 28 Jan 1984 (Mean & Hudson 1985).

*C. hiaticula Ringed Plover Twenty or more present at Lome in Mar and Sept to Nov 1985. Maxima 50 on 24 Mar and 56 on 17 Nov, but 200 on 2 Feb 1986. Recorded by De Roo et al. (1969, 1972), Robinson (1972) and Browne (1980).

*C. alexandrinus Kentish Plover Singletons at Lome on 11 & 31 Mar and 10 Nov 1985.

*C. marginatus White-fronted Sand Plover Present on the beach at Lome in Mar and Sept-Nov 1985. Maxima 18 on 1 Nov and 20 pairs on 2 Feb 1986. Probably a breeding resident as most birds paired off and some behaved as if defending nesting areas. Recorded by De Roo et al. (1969) and Browne (1980).

*C. pecuarius Kittlitz's Sandplover One at Lome on 9 Mar 1985.

*Pluvialis dominica Lesser Golden Plover One at Loma on 19 Oct 1985. See Elgood (1982) for comments on West African records of this species.

*P. squatarola Grey Plover Present at Lome in Mar and Sept-Nov 1985. Maxima 52 on 1 Nov when one bird was still in summer plumage and 54 on 2 Feb 1986. Recorded by De Roo et al. (1972) and Browne (1980).

*Arenaria interpres Turnstone Present at Lome in Mar and Sept-Nov 1985 and Feb 1986. Maximum count 30 on 29 Sept when one still in summer plumage. On 13 Oct one was seen being snared by local trappers. Recorded by Browne (1980).

*Phalaropus fulicarius Grey Phalarope On 9 Mar 1985 three were observed at Lome swimming and feeding in the sea just beyond where the waves began to break. One found dead on the beach at Lome on 24 Mar 1985.

SCOLOPACIDAE

*Limosa limosa Black-tailed Godwit One at Lome on 29 Sept 1985.

*L. lapponica Bar-tailed Godwit A pair at Lome on 19 Oct, 1 & 10 Nov 1985. On 17 Nov 1985 8 were there, of which one was found badly injured with a head wound, probably inflicted by a catapult. The youth who made off with the bird said he was going to eat it. Recorded by Browne (1980).

*Numenius arquata Curlew Two at Lome on 13 Oct and one on 19 Oct 1985 and 2 Feb 1986. Recorded by Millet-Horsin (1923) and Browne (1980).

*N. phaeopus Whimbrel Present at Lome in small numbers in Mar and Sept-Nov 1985 and Feb 1986. Maximum 8 on 19 Oct 1985. Recorded by Browne (1980).

*Calidris alba Sanderling At least 100 present on the beach at Lome in Mar and Sept-Nov 1985. The spring maximum in 1985 was 250 on 24 Mar and the autumn peak was 400 on 17 Nov. Sixteen there in 1 Feb 1986 followed by an influx of 500 the next day. Birds bearing rings which were longer than those used by European ringing schemes, and possibly of South African origin (C. J. Mead in litt.) were seen on 9 Mar, 29 Sept, 19 Oct (3 ringed birds) and 17 Nov (2 ringed birds). The species is probably often snared by local trappers, as one was seen with a foot-less broken leg, and so the origin of the ringed birds may eventually be demonstrated. Sanderlings were also recorded at Lome by De Roo et al. (1969, 1972) and by Browne (1980) but one, in full breeding plumage, at Lama-Kara on 16 May 1984 is the first inland record for the country. Inland records are also known from Ghana (Moorhouse 1968) and Nigeria (Dowsett & Walsh 1968).

*C. alpina Dunlin One at Lome on 19 Oct 1985.

*C. canutus Knot One at Lome on 17 Nov 1985 and 16 there on 1 Feb 1986. Recorded by De Roo et al. (1972).

*C. ferruginea Curlew Sandpiper One at Anecho on 8 Mar 1985. One at Lome on 19 Oct, 4 on 27 Oct and 19 on 17 Nov 1985.

*C. minuta Little Stint Three at Lome on 24 & 31 Mar 1985. One there on 13 Oct, 7 from 19 Oct to 17 Nov 1985 and 100 on 2 Feb 1986. Recorded by Robinson (1972) and Browne (1980).

Tringa ochropus Green Sandpiper Seven at Lome on 1 Mar and singles on 29 Sept and 13 Oct 1985.

T. glareola Wood Sandpiper Maximum count at Lome was 12* on 13 Oct 1985.

*T. stagnatilis Marsh Sandpiper One at Anecho on 8 Mar 1985 and another at Lome two days later. Recorded by Robinson (1972).

T. totanus Redshank One at Lome from 29 Sept to 17 Nov 1985 and on 1 Feb 1986.

*T. erythrops Spotted Redshank Four at Lama-Kara on 17 Mar 1985.

T. nebularia Greenshank Maximum at Lome was 41 on 1 Feb 1986.

*Philomachus pugnax Ruff One at Lome on 13 Oct, 2 there on 19 & 27 Oct and 1 on 10 Nov 1985. Recorded by Robinson (1972) and Browne (1980).

RECURVIROSTRIDAE

Himantopus himantopus Black-winged Stilt Six at Anecho on 8 Mar 1985.

*Recurvirostra avosetta Avocet At 1625 hrs on 27 Oct 1985 a flock of 10 flew leisurely with occasional glides, in a V formation over Lome beach and out to sea. When it was about 500 m out the flock veered west and disappeared over Ghanaian waters. Five at Lome on 2 Feb 1986.

ROSTRATULIDAE

*Rostratula benghalensis Painted Snipe One at Lama-Kara on 17 Mar 1985. Recorded by Browne (1980).

GLAREOLIDAE

Pluvianus aegyptius Egyptian Plover One at Lama-Kara on 16 May 1984.

G. nuchalis Rock Pratincole Two pairs at the colony near Landa-Pozanda (Cheke 1980) between 14 May & 8 Sept 1984. None there on 16 Sept.

STERCORARIIDAE

*Stercorarius pomarinus Pomarine Skua One flying west off Lome on 11 Mar 1985

*S. parasiticus Arctic Skua Three off Lome, harassing terns, on 17 Nov 1985. A bird ringed as a pullus in Shetland in 1979 was recovered at Lome the next year (Spencer & Hudson 1981).

LARIDAE

*Larus fuscus Lesser Black-backed Gull An immature bird off Lome on 29 Sept 1985, 6 adults there on 1 Nov and singles on 10 & 17 Nov 1985. Recorded by Browne (1980).

*L. sabini Sabine's Gull A first winter bird at Lome on 2 Feb 1986.

*Gelochelidon nilotica Gull-billed Tern Singles at Lome on 9 Mar, 1 & 10 Nov and 5 there on 27 Oct 1985.

*Hydroprogne tschegrava Caspian Tern Two at Anecho on 8 Mar 1985.

Sterna maxima Royal Tern Up to 8 present at Lome in Mar and Sept-Nov 1985 and as many as 80 in Feb 1986.

*S. sandvicensis Sandwich Tern Twelve at Anecho on 8 Mar 1985. Up to 7 at Lome in Mar 1985. Thirty there on 29 Sept 1985 but none in Oct, followed by a substantial influx in Nov. Twenty noted on 8 Nov, preceding more than 750 on the 10th. The latter included a raft of 150 resting in the sea and one bird with a BTO-type ring. At least 8 British-ringed birds have been recovered in Togo (Spencer & Hudson 1982). On 26 Nov only 26 were counted and a similar number were present on 2 Feb 1986. Recorded by Browne (1980).

*S. hirundo Common Tern Singles at Lome on 24 Mar and 27 Oct 1985. 100 there on 8 Nov and more than 500 in an influx with S. sandvicensis on 10 Nov but these had vanished by 12 Nov with only 25 remaining on 17 Nov. One of the latter was bearing a BTO-type ring. Robinson (1972) mentioned recoveries in Togo of birds ringed in Finland and Northumberland. Spencer & Hudson (1982) cite 4 British-ringed birds found in Togo. Recorded by Browne (1980) and by De Roo et al. (1969).

*S. dougallii Roseate Tern Singles at Lome on 11 Mar and 29 Sept 1985 and 2 there on 17 Nov 1985. Twelve British-ringed birds have been recovered in Togo (Spencer & Hudson 1982).

*S. albifrons Little Tern Three at Lome on 10 Nov and 7 on 17 Nov 1985. Recorded by Browne (1980).

*S. balaenarum Damara Tern Six at Lome on 29 Sept 1985, of which three were in breeding plumage. One of the latter present on 13 & 19 Oct 1985 and 2 on 27 Oct and 10 Nov 1985. When approached the birds walked away while watching the observer, seeming reluctant to fly. Recorded by Browne (1980) whose birds were all in non-breeding plumage.

*Chilodonias niger Black Tern Fifty at Lome on 9 Mar 1985, one of which was trailing a 2 m length of twine from a leg and was presumably an escapee from a snare. About 40 still present on the beach on 11 Mar, 10 on 20 Mar but none there on 24 Mar, although 4 were seen at a lagoon in Lome on 31 Mar 1985. Sixty at Lome on 29 Sept 1985, 80 feeding appeared on 27 Oct and 115 arrived with the influx of Sterna spp. on 10 Nov 1985. One C. niger on the latter date was badly oiled. Forty still present on 17 Nov 1985 and 2 Feb 1986. Recorded by De Roo et al. (1969) and Browne (1980).

*S. leucoptera White-winged Black Tern Singles at Lome on 29 Sept and 27 Oct 1985 and 2 there on 1 Nov 1985.

COLUMBIDAE

*Columba iriditorques Bronze-naped Pigeon One in forest beside the waterfall at Kpime-Tomegbe on 12 Mar 1985. Recorded by De Roo et al. (1969, 1970).

*Turtur tympanistria Tambourine Dove One at Djodji on 21 Mar 1985. Recorded by De Roo et al. (1969, 1970, 1971, 1972).

* T. brehmeri Blue-headed Dove Singles at Djodji on 29 Mar and 25 Oct 1985.

Oena capensis Masked Dove One at Lama-Kara on 17 Mar 1985. Regularly seen in this area in the dry season.

MUSOPHAGIDAE

Corythaeola cristata Great Blue Turaco A pair 10 km south of Landa-Mono on 19 June 1984.

Tauraco persa Guinea Turaco A pair near Aledjo on 22 July 1984. Calls were heard in the Aledjo forest from May to August. A pair in gallery forest at 08°39'N, 00°42'E, near the source of the Kpaza river, in the Fazao mountains on 13 Sept 1984.

CUCULIDAE

Clamator levaillantii Striped Cuckoo Pairs seen 5 km east of Bafilo on 27 May and at Sara-Kawa on 5 Aug 1984. One at Atakpame on 21 Oct 1985.

Chrysococcyx caprius Didric Cuckoo One calling near Mo on 16 June 1984, two near Landa-Pozanda the next day and one calling at Lama-Kara on 30 Aug 1984 and at Badou in Mar & Oct 1985.

*Centropus leucogaster Black-throated Coucal Singles at Djodji on 26 Mar 1985 and at Badou and Kouniohou on 30 Mar 1985.

*C. grillii Black Coucal Two widely separated birds were seen in rank grass beside a dam at Lama-Kara on 24 July 1984. None were seen at the same site on 28 July nor 26 Aug. One near Tabligbo on 14 Nov 1985. Recorded by De Roo et al. (1971) and Browne (1980).

Ceuchmochares aereus Yellowbill Singles near Mo on 15 June and 3 July 1984 and Kouniohou on 30 Mar 1985.

OTIDAE

*Tyto alba Barn Owl One at Mo on 27 June 1984. Recorded by De Roo et al. (1969, 1970).

Otus leucotis White-faced Scops Owl One seen taking a beetle in Lama-Kara on 2 July 1984.

Bubo africanus Spotted Eagle Owl One near Evou Apegame on 14 Oct 1985.

CAPRIMULGIDAE

*Captimulqus climacutus Long-tailed Nighthawk A male found dead on the road 14 km north of Naboulgou on 13 May 1984 is our only confirmed record. Additional sight records, probably of this species, were from Landa-Pozanda in June & July during both 1983 & 1984 and Badou on 21 Oct 1985. There are many other records from Togo (millet-Horsin 1923, De Roo et al. 1969, 1970, 1971, 1972, Browne 1980, Herremans & Stevens 1983).

APODIDAE

Telacanthura ussheri Mottled Spinetail A pair near Bafilo on 27 May 1984.

Apus apus European Swift Two near Bafilo on 27 May and one there on 26 Aug 1984. More than 100 in the port area of Lome on 10 Mar 1985. Four near Dzobegan on 13 Mar 1985, 2 at Lama-Kara on 17 Mar 1985. Twenty-five at Djodji on 21 Mar, 6 on 26 Mar and 2 on 29 Mar 1985.

A. caffer African White-rumped Swift Two pairs at Aledjo on 17 June 1984, one there on 28 July 1984, a single bird near Mo on 29 June 1984 and 3 near Naboulgou on 27 Aug 1984.

A. melba Alpine Swift One near Dzobegan on 13 Mar 1985 in the company of 4 A. apus and hundreds of H. rustica. Twenty-six near Tchebebe on 18 Mar 1985 flying above a teak plantation together with numerous D. urbica and A. affinis. Fifteen feeding just above tree height over forest at Djodji on 21 Mar 1985 and 4 there 5 days later. None seen during Sep-Nov 1985.

ALCEDINIDAE

Ceryle maxima Giant Kingfisher Several beside the Anie river near Blitta on 19 June 1984. A female at Djodji on 15 Oct 1985.

Alcedo quadibrachys Shining-blue Kingfisher One at Djodji on 21 & 27 Mar 1985.

Alcedo cristata Malachite Kingfisher One near Mo on 30 June 1984.

Ispidina picta Pygmy Kingfisher One killed by a car near Mo on 27 June 1984.

*Halcyon chelicuti Striped Kingfisher One near Mo on 29 June 1984. One 20 km north of Lome on 20 Mar 1985 and another found dead on Lome beach on 10 Nov 1985. Recorded by De Roo et al. (1969, 1970, 1971).

H. leucocephala Grey-headed Kingfisher Two at Badou on 15 Mar 1985 and singles at Kouniohou and Atakpame on 23 Mar 1985.

H. senegalensis Woodland Kingfisher Singles at Sansanne-Mango and Naboulgou on 21 Aug and at Tchamba on 13 Sept 1984. Noted at Tsevie, Kpalime, Amlame and Djodji in Mar 1985, and at the latter side in Oct 1985.

H. malimbica Blue-breasted Kingfisher Three near Mo on 29 June 1984, 1 at Atakpame on 3 & 4 July 1984 and 1 near Aledjo on 25 Aug 1984. One at Djodji on 15 Oct 1985.

MEROPIIDAE

Merops pusillus Little Bee-eater One chivvying an immature Indicator indicator at Lama-Kara on 16 May 1984 and a pair near Aledjo on 17 June 1984.

M. hirundineus Swallow-tailed Bee-eater One at Landa-Mono on 4 July 1984.

M. albicollis White-throated Bee-eater Twenty near Mo on 25 May 1984, 12 at Landa-Mono on 28 May 1984 and a pair at Aledjo on 17 June 1984. More than 30 near Evou Apegame on 15 Mar 1985, up to 5 at Djodji 21-29 Mar 1985 and 3 near Avegode on 14 Nov 1985.

M. nubicus Carmine Bee-eater Two between Sansanne-Mango and Naboulgou on 30 Aug 1984.

CORACIIDAE

Coracias abyssinica Abyssinian Roller One at Sansanne-Mango on 21 & 30 Aug and 14 Oct 1984. None present in the Lama-Kara area from June to mid Oct 1984.

C. cyanogaster Blue-bellied Roller Singles at Tigbada on 19 June and at Landa-Mono on 4 July and a pair at Landa-Pozanda on 16 Sept 1984. In Mar 1985 seen 30 km north of Lome, as Sassanou, Amou-Oblo, Amlame & Kpalime. One at Amou-Oblo on 4 Oct 1985.

*Eurystomus gularis Blue-throated Roller One near Dzobegan on 13 Mar 1985, 2 near Badou on 15 Mar and 1 at Idifiou on 24 Oct 1985. Recorded by De Roo et al. (1969, 1970, 1972).

BUCEROTIDAE

Tropicranus albocristatus White-crested Hornbill One at the waterfall at Kpime-Tomegbe on 3 Oct 1985.

T. erythrorhynchus Red-billed Hornbill One 42 km north of Sansanne-Mango on 21 Aug 1984 and another 50 km further south on 30 Aug 1984.

CAPITONIDAE

Lybius vieilloti Vieillot's Barbet Singles near Landa-Mono on 26 July 1984 and 5 km east of Bafilo on 26 Aug 1984.

*L. hirsutus Hairy-breasted Barbet One at Djodji on 21 Mar 1985. A pair excavating holes in dead branches there 16-25 Oct 1985. Recorded by De Roo et al. (1969, 1970, 1971, 1972).

Gymnobucco calvus Naked-faced Barbet Common in the Misahohe forest in Mar 1985 and at Djodji in Mar & Oct 1985.

*Pogoniulus scolopaceus Speckled Tinker Bird One at Djodji on 29 Mar 1985. Recorded by Dekeyser (1951), Douaud (1956) and De Roo et al. (1969, 1970, 1971, 1972).

*P. leucolaima Lemon-rumped Tinker Bird Regular at Aledjo between 17 June & 25 Aug 1984. Recorded by De Roo et al. (1969, 1971, 1972).

*Trachyphonus purpuratus goffini Yellow-billed Barbet At least three birds were seen entering, leaving and waiting at the entrance of a nest hole 10 m up a dead tree at Djodji in Mar 1985. They were also heard calling in the area at the time but none were present in Oct 1985, perhaps because their breeding tree had been felled. Recorded by De Roo et al. (1970).

INDICATORIDAE

Indicator indicator Greater Honeyguide An immature at Lama-Kara 16 May 1984.

*I. minor Lesser Honeyguide One 5 km east of Bafilo on 27 May 1984. Recorded by De Roo et al. (1969, 1971, 1972).

PICIDAE

*Campethera nivosa Buff-spotted Woodpecker A female at Djodji on 29 Mar 1985. Recorded from Misahohe by Reichenhow (1897).

*Dendropicos gabonensis Gaboon Woodpecker A female at Djodji, feeding alone high up a tree, on 22 Oct 1985.

*D. pyrrhogaster Fire-bellied Woodpecker A female in the Misahohe forest on 13 Mar 1985 and a male there the next day. Recorded from the same site by Reichenhow (1897).

ALAUDIDAE

Mirafra rufocinnamomea Flappet Lark Birds displaying at

Lama-Kara and Mo on 2 June 1984 and another seen at Lama-Kara on 17 Mar 1985.

HIRUNDINIDAE

*Riparia riparia European Sand Martin Fifteen, in company with 100 Hirundo rustica, feeding low over the Gban-Houa river at Djodji on 26 Mar 1985. Two with a party of 50 H. rustica at the Lama-Kara dam on 6 Oct 1985 when all the birds were seen splashing into the water. On 16 Oct 1985 5 seen at Djodji together with 50 H. rustica and 2 Delichon urbica. R. riparia was recorded from Togo by Douaud (1957).

Hirundo rustica European Swallow A few in the Lome area 6-8 Mar 1985. More than 1000 present on the Plateau de Danyi, with a flock of 500 at Dzobegan on 13 Mar 1985. These were presumably migrants. A hundred at Djodji on 26 Mar 1985. At 1715 hrs on 6 Oct 1985 a flock of 50 swallows and 2 R. riparia suddenly appeared over the lake at the Lama-Kara dam. The birds swooped down low over the water and struck its surface with their chests, making substantial and audible splashes. The flock made two such passes over the lake during a two or three minute spell before flying off southward. Oct 6 was the first day that the Harmattan wind had been felt at Lama-Kara that season, an earlier date than is usual, and this wind may well aid migratory movements but its associated dryness and heat make for difficult conditions. Perhaps the birds were dampening their chest and belly feathers to aid cooling, as well as taking the opportunity for a drink.

*H. leucosoma Pied-winged Swallow On 26 Aug 1984 a pair were seen 5 km east of Bafilo. The birds were hawking with a rapid flight, flying low over well-wooded savanna interspersed with cultivated ground and a few huts. The speed of their flight made them difficult to observe but they repeatedly flew over the same ground and darted with remarkable agility around the trees and other obstacles. Recorded by De Roo et al. (1969).

H. abyssinica Lesser Striped Swallow Pairs seen at Atakpame on 15 Mar 1985 and Badou on 2 Mar 1985. Many records from May to July in the Lama-Kara area in 1984 and in previous years when nesting noted (Cheke & Walsh 1980, 1984). Two near Naboulgou on 21 Aug 1984 but none seen Sept-Nov 1985 nor Sept-Dec 1981. The species is apparently a migrant, leaving sooner than other wet season visitors, with a pattern similar to that in Nigeria (Elgood et al. 1973).

H. fuligula Rock Martin A pair at the Faille d'Aledjo on 25 Aug were associated with one of two nests on a rock face. The birds appeared to be building and on 9 Sept they were still present at the nest, which had been enlarged.

H. preussi Preuss' Cliff Swallow Many at Naboulgou and one 57 km further north on 13 May 1984. Numerous near Mo on 29

June 1984.

Delichon urbica House Martin On 18 Mar 1985 160 were counted near Tchebebe and five more flocks were seen between there and Blitta. The birds were feeding, together with Apus affinis and A. melba, above roadside teak plantations adjoining southern Guinea savanna woodland. Six at Djodji on 29 Mar 1985 and 2 there on 16 Oct 1985. The species' occurrence in Togo was discussed by Douaud (1956a).

MOTACILLIDAE

Anthus leucophrys Plain-Backed Pipit Two at Lome on 31 Mar 1985.

Macronyx croceus Yellow-throated Longclaw Two near Landa-Pozanda on 2 June 1984 and singles at Aledjo on 17 June 1984 and at Mo on 30 June 1984.

*Motacilla flava Yellow Wagtail Up to 5 at Lome in Mar 1985. One at Lama-Kara on 17 Mar 1985. Present at Lome Oct-Nov 1985, with a peak of 22 on 1 Nov. Recorded by Douaud (1957), De Roo et al. (1972), Robinson (1972) and Browne (1980).

CAMPEPHAGIDAE

Campephaga phoenicea Red-shouldered Cuckoo-shrike A male at Lana-Pozanda on 26 May 1984, two males 5 km east of Bafilo the next day and another male at Aledjo on 28 May 1984. A pair near Landa-Pozanda on 17 June and a male there on 8 Sept 1984.

PYCNONOTIDAE

*Andropadus virens Little Greenbul One in the Misahohe forest on 2 Oct 1985. Recorded by De Roo et al. (1969, 1970, 1971, 1972), Douaud (1956b) and Millet-Horsin (1923).

*Thescelocichla leucopleura White-tailed Greenbul Up to 4 at Djodji in Mar & Oct 1985.

*Chlorocichla simplex Simple Leaflove One at Djodji on 23 Mar 1985. Recorded by Millet-Horsin (1923) and De Roo et al. (1969, 1970, 1971, 1972).

*Phyllastrephus scandens Leaflove Common in the Aledjo forest 1 July-25 Aug 1984. Also seen near Mo and at Atakpame on 3 July 1984 and in the Misahohe forest on 14 Mar 1985. Recorded by De Roo et al. (1972).

*Nicator chloris Nicator One at Djodji on 26 Mar 1985. Recorded by Douaud (1956b) and by De Roo et al. (1969, 1971, 1972).

*Baeopogon indicator togoensis Honeyguide Greenbul One in the Misahohe forest on 2 Oct 1985. Recorded by Douaud (1956b) and by De Roo et al. (1971, 1972).

LANIIDAE

*Prionops caniceps Chestnut-bellied Helmet-shrike Six near Sodo on 10 Oct 1985 and 2 at Djodji on 15 Oct 1985. Recorded by De Roo et al. (1969, 1970, 1971, 1972).

Tchagra senegala Black-crowned Tchagra One was seen carrying a full bill-load of food 5 km east of Bafilo on 27 May 1984.

Laniarius aethiopicus Tropical Boubou Common in the Mo valley June-July 1984.

*Lanius collaris Fiscal Shrike Noted at Anfoin, Atakpame, Badou, Lome and Sassanou in Mar 1985 and at Lome in Oct 1985. Recorded by De Roo et al. (1969), Robinson (1972) and Browne (1980).

*L. senator Woodchat Shrike One at Tabligbo on 8 Mar 1985. Recorded by Douaud (1957), Robinson (1972) and Browne (1980).

TURDIDAE

*Myrmecocichla albifrons White-fronted Black Chat One near Mo on 27 June 1984 and another near Naboulgou on 27 Aug 1984. Recorded by Douaud (1956b) and De Roo et al. (1969).

SYLVIIDAE

*Cisticola juncidis Fan-tailed Warbler A single bird in degraded savanna and farmland near Aledjo on 29 July 1984. Present at Lome in Mar and Sept-Nov 1985 and Feb 1986. Recorded by Browne (1980).

*C. lateralis Whistling Cisticola In 1984 a pair was established in abandoned farmland within the Aledjo forest. The birds were seen between 8 July and 25 Aug. On 26 Aug 1984 2 were singing in reply to each other 5 km east of Bafilo. Recorded by De Roo et al. (1969, 1970, 1971).

C. brachyptera Siffling Cisticola One was flushed, presumably from near a nest, carrying a faecal pellet at Kpayando on 5 Aug 1984.

*Apalis flavida Yellow-breasted Apalis One at the Faille d'Aledjo on 17 June 1984. Recorded by De Roo et al. (1969).

*Hypergerus atriceps Moho One in forest beside the Amoutchou river, near Idifiou on 9 Oct 1985. Recorded by Millet-Horsin (1923) and Browne (1980).

*Eremomela badiceps Brown-crowned Eremomela One at Djodji on 2 Oct 1985. An active bird, leaf-gleaning near the top of a forest tree.

*Sylvietta virens Green Crombec One made repeated visits to the same part of a creeper, suggesting possible nesting, at Aledjo on 17 June 1984. A pair were still present at the same site on 7 July. Recorded by De Roo et al. (1970, 1972).

*Phylloscopus trochilus Willow Warbler One in the Misahohe forest on 13 Mar 1985. Recorded by Douaud (1957), De Roo et al. (1970, 1972) and Louette (1975).

*P. sibilatrix Wood Warbler One in the Misahohe forest on 14 Mar 1985. Recorded by Douaud (1957) and De Roo et al. (1972).

MUSCICAPIDAE

*Ficedula hypoleuca Pied Flycatcher One hawking from a teak plantation beside a road near Tchebebe on 18 Mar 1985. Recorded by Douaud (1957) and De Roo et al. (1970, 1972).

*Melaenornis edolioides Black Flycatcher A pair 5 km east of Bafilo on 27 May 1984.

*Bradornis pallidus Pale Flycatcher Singles near Bafilo on 27 May & 26 Aug 1984, at 09° 06'N, 01° 01'E on 30 June 1984 and at Tomegbe on 22 Oct 1985. Recorded by De Roo et al. (1969, 1971, 1972).

*Megabyas flammulatus Shrike-flycatcher A female in the Misahohe forest on 13 Mar 1985, perched upright occasionally moving its tail from side to side. Recorded by De Roo et al. (1972).

*Terpsiphone rufiventer Red-bellied Paradise Flycatcher Three at Djodji on 21 Mar 1985 and one at Badou two days later. A female at Akloa on 17 Oct 1985. Recorded by De Roo et al. (1971, 1972).

*Myioparus plumbeus Grey Tit-flycatcher Singles near Pewa on 5 Aug 1984 and at Akloa on 17 Oct 1985. Recorded by De Roo et al. (1969).

PARIDAE

*Parus leucomelas White-shouldered Black Tit Four seen in a fig tree near Aledjo on 17 June 1984 and noted near Mo on 26 & 27 June 1984. Recorded by De Roo et al. (1972).

NECTARINIIDAE

Nectarinia coccinigaster Splendid Sunbird Many attracted to flowers of Berlinia grandiflora at Mo May-June 1984.

N. cuprea Copper Sunbird Not seen at Lama-Kara in May 1984, but two pairs were disputing there on 16 June. The species was also feeding from B. grandiflora at Mo in May-June 1984.

*N. olivacea Olive Sunbird One at Tomegbe on 22 Oct 1985. Recorded by Dekeyser (1951) and De Roo et al. (1969, 1970, 1971, 1972).

*N. verticalis Green-headed Sunbird Regularly seen in the Aledjo forest and Mo areas from 25 May to 26 Aug 1984, often feeding at flowers of B. grandiflora. Also recorded from the Bafilo area on 5 & 26 Aug 1984. Recorded by De Roo et al. (1969, 1970, 1971) and Browne (1980).

*N. cvanolaema Blue-throated Brown Sunbird A pair at Djodji on 16 Oct 1985 feeding on the flowers of an African Tulip Tree (Spathodea campanulata).

N. adelberti Buff-throated Sunbird A pair at Djodji on 15 Oct 1985, feeding on flowers of S. campanulata. Male seen there again on 16 & 25 Oct 1985.

ZOSTEROPIDAE

*Zosterops senegalensis White-eye Singles near Mo on 26 & 29 June 1984. Recorded by De Roo et al. (1969, 1970, 1971, 1972) and Louette (1975).

EMBERIZIDAE

Emberiza tahapisi Cinnamon-breasted Rock-bunting One at Defale on 14 Oct 1984.

E. cabanisi Cabani's Bunting A pair near Aledjo on 27 July 1984.

FRINGILLIDAE

*Serinus gularis Streaky-headed Seed-eater At 0830 hrs on 28 June 1984 a flock of 30 were seen feeding on early millet near Mo and at 0550 hrs on 30 June 1984 94 were counted in the same field. One at Badou on 29 Mar 1985. Recorded by De Roo et al. (1969, 1972) and Louette (1975).

PLOCEIDAE

*Ploceus nigerrimus castaneofuscus Chestnut and Black Weaver A male near Tsevie on 8 Mar 1985 and at least 50 breeding in a mixed colony with P. cucullatus 5 km south of Amoussokoko

on 10 Oct 1985. Recorded by De Roo et al. (1969, 1970).

*P. tricolour Yellow-mantled Weaver Two pairs in the Misahohe forest on 13 Mar 1985. A pair building in a colony of 10 nests at Kouniohou on 23 Mar 1985 and other pairs near Idifiou on 9 & 24 Oct 1985. Recorded by Dekeyser (1951) and De Roo et al. (1969, 1971, 1972).

Malimbus rubricollis Red-headed Forest Weaver Seen at Kpalime and Djodji in Mar 1985 and at Amoussokoko and Djodji in Oct 1985.

M. rubriceps Red-headed Weaver A female at Aleheride on 25 May 1984.

Quelea erythrops Red-headed Dioch A flock of up to 30 birds near Landa-Pozanda on 17 June 1984.

*Nigrita canicapilla Grey-crowned Negro-Finch A pair at the Faille d'Aledjo on 26 June 1984 and another in gallery forest at 09° 06'N, 01° 01'E on 28 June 1984. A pair at Djodji in Mar & Oct 1985. Recorded by De Roo et al. (1969, 1970, 1971) and Browne (1980).

*Pytilia phoenicoptera Red-winged Pytilia One at Ayagba on 23 Oct 1985. Recorded by De Roo et al. (1969, 1972).

ESTRILDIDAE

*Spermophaga haematina Blue-billed Weaver One at Djodji on 29 Mar 1985. Recorded by De Roo et al. (1971).

Lagonosticta rubricata Blue-billed Firefinch A pair at Mo on 16 June and a male there on 26 June 1984. Two pairs near Landa-Pozanda on 17 June 1984.

L. larvata Black-faced Firefinch A pair at Mo on 26 June 1984 and a male at 09° 23'N, 01° 10'E on 5 Aug 1984.

Lonchura bicolor Blue-billed Mannikin A pair at Djodji on 16 Oct 1985.

*L. fringilloides Magpie Mannikin A flock of 5 seen preening in a dead tree at Djodji on 25 Oct 1985. Recorded by De Roo et al. (1969, 1972) and Browne (1980).

STURNIDAE

*Lamprotornis splendidus Splendid Starling Four in the Misahohe forest on 13 Mar 1985, 3 at Djodji two days later and 1 at Kounichou on 23 Mar 1985. Up to 3 at Djodji on 15, 16 & 25 Oct 1985. These noisy and conspicuous birds were identified by their loud calls (noted as variable but including "squaark, squaark" and "eey-aw ei ei uh") often

issued from near the top of trees, their slimmer and sleeker shape that L. purpureus, their longish rounded tails with dark subterminal bands, dark blue cheeks and bellies contrasting with the remainder of their paler green-blue glossy plumage. Eyes white. No previous published records between Sierra Leone and Benin but L. splendidus has been seen independently by both L. Grimes (pers. comm.) and J. F. W.

Cinnyricinclus leucogaster Amethyst Starling A male 5 km east of Bafilo on 27 May 1984 and two pairs at both Aledjo and Landa-Pozanda on 17 June 1984. Eleven at Mo on 26 June 1984 and a male near Tsevie on 8 Mar 1985.

DICURIDAE

*Dicrurus ludwigii Square-tailed Drongo A pair at the Faille d'Aledjo on 8 July 1984 and several more nearby on the same day. Recorded by De Roo et al. (1969, 1972).

ORIOLIDAE

*Oriolus brachyrhynchus Black-headed Oriole One in gallery forest near Tsevie on 8 Mar 1985. Recorded by De Roo et al. (1969, 1972).

*O. nigripennis Black-winged Oriole One in the Misahohe forest on 13 Mar 1985. Recorded from the same site by Reichenhow (1897).

DISCUSSION

In this paper we have given details of 107 species which we had not seen during previous visits to Togo between 1972 and 1983. This surprisingly high number of new species is a consequence of a concentration of effort in forests and along the coastline. Also, few of the earlier visits had been made during the dry season when many Palaearctic migrants were present. Eighty of the 107 species had been collected or seen in Togo by previous authors and in some cases are unremarkable records of common species. Nevertheless the rapid degradation of African habitats makes up to date information important for planning the ever more urgent conservation measures needed, especially for forest birds and shorebirds.

The Damara Tern S. balaenarum is a threatened species listed as rare by Collar & Stuart (1985). These authors also included Togo as part of the former range of the threatened White-necked Picathartes Picathartes gymnocephalus. However, it is unlikely that this species has ever been recorded in what is now the Republic of Togo (Cheke 1986): many early records from 'Togo' refer to collections made in

that part of 'Togoland' which is now part of Ghana. We have found, however, four species within the Togolese borders which Collar & Stuart list (in their Appendix G) as candidate species for treatment as threatened in Africa. These four are: Saddlebill Stork E. senegalensis, Long-tailed Hawk U. macrourus, Crowned Crane B. pavonina and Bronze-naped Pigeon C. iriditorques. In addition Togo is a wintering area for the Peregrine F. peregrinus and Roseate Tern S. dougallii which are included in the list of threatened species in other Red Data books.

Preservation of the beach-front at Lome and the enforced banning of bird-snaring there and elsewhere would aid the protection of the two rare terns, as well as many other wintering shorebirds. The forested parts of the upland Plateaux regions, near Kpalime (e.g. the Misahohe forest) and Badou (e.g. the Asuakawkow valley), provide shelter for many Afro-tropical species (including Damara Tern and White-necked Picathartes) and are also important for Palaearctic migrants such as A. apus, A. melba, D. urbica and H. rustica.

SUMMARY

Records of birds of interest seen in Togo during 1984-early 1986 are given. By concentrating on coastal and forest habitats in the dry season, 107 species additional to those in the authors' previous published lists for the country were observed. Twenty-seven of the species were new to Togo. Attention is drawn to rare species and conservation needs

RESUME

Renseignements sont donnés sur des oiseaux intéressants vus au Togo entre 1984 et la debut de 1986. Cent-sept espèces, dont la plupart étaient des oiseaux de la cote ou du foret, étaient observees, en plus de celles déjà indiqués par les auteurs. Vingt-sept espèces sont nouvelles pour le Togo. On fait remarquer les espèces rares et des mesures pour la protection des oiseaux.

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Dr. R. A. Cheke,
c/o Tropical Development and Research Institute,
College House, Wrights Lane, London W8 5SJ, UK

Dr. J. F. Walsh,
80 Arundel Road, Lytham St. Annes, Lancashire FY8 1BN, UK

S. A. Sowah,
c/o WHO Onchocerciasis Control Programme, B.P. 549,
Ouagadougou, Burkina Faso.

APPENDIX

GAZETTEER OF TOGO

ADETA	07° 08' N, 00° 44' E	IDIFIU	07° 38' N, 00° 58' E
AKLOA	07° 31' N, 00° 37' E	KOUNIOHOU	07° 40' N, 00° 47' E
ALEDJO	09° 15' N, 01° 12' E	KPALIME	06° 54' N, 00° 37' E
ALEHERIDE	09° 13' N, 01° 12' E	KPAYANDO	09° 22' N, 01° 09' E
AMLAME	07° 28' N, 00° 54' E	KPIME-TOMEGBE	07° 01' N, 00° 39' E
AMOU OBLO	07° 24' N, 00° 53' E	KUMASI (GHANA)	06° 45' N, 01° 40' W
AMOUSSOKOPE	06° 40' N, 00° 51' E	LAMA-KARA	09° 33' N, 01° 11' E
ANECHO	06° 14' N, 01° 36' E	LANDA-MONO	08° 36' N, 01° 16' E
ANFOIN	06° 19' N, 01° 37' E	LANDA-POZANDA	09° 31' N, 01° 17' E
ANIE	07° 45' N, 01° 12' E	LOME	06° 08' N, 01° 14' E
ATAKPAME	07° 32' N, 01° 08' E	MO	09° 05' N, 01° 03' E
AVEGODE	06° 48' N, 01° 36' E	MISAHOHE	06° 57' N, 00° 35' E
AVETONOU	06° 48' N, 00° 48' E	NABOULGOU	10° 11' N, 00° 48' E
AYAGBA	07° 46' N, 00° 47' E	PEWA	09° 16' N, 01° 14' E
BADOU	07° 35' N, 00° 36' E	SANSANNE-MANGO	10° 22' N, 00° 28' E
BAFILO	09° 21' N, 01° 14' E	SASSANOU	07° 16' N, 00° 40' E
BLITTA	08° 18' N, 00° 59' E	SODO	07° 19' N, 00° 49' E
DAPAON	10° 51' N, 00° 12' E	TABLIGBO	06° 35' N, 01° 30' E
DEFALE	09° 53' N, 01° 05' E	TCHAMBA	09° 02' N, 01° 25' E
DJODJI	07° 40' N, 00° 35' E	TCHEBEBE	08° 26' N, 00° 59' E
DZOBEGAN	07° 41' N, 00° 41' E	TIGBADA	08° 30' N, 00° 59' E
EVOU APEGAME	07° 32' N, 00° 02' E	TOMEGBE	07° 31' N, 00° 36' E
HIHEATRO	07° 32' N, 01° 06' E	TSEVIE	06° 25' N, 01° 13' E

THE RED-CAPPED ROBIN-CHAT COSSYPHA NATALENSIS IN
WEST AFRICA

by S.N. Stuart and M.E. Gartshore

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INTRODUCTION

The Red-capped Robin-chat Cossypha natalensis is a common bird in forest patches through much of eastern, central and southern Africa. It avoids the main rainforest belt of west and central Africa but occurs in forest patches to the south of the belt, as far north as Gabon, Congo, northern Angola and southern Zaire (Chapin 1953; Rand et al. 1959; Schouteden 1962, 1964, 1965; Traylor 1963; Hall and Moreau 1970). However, to the north of the rainforest belt there are only very few records, all along the northern edge of rainforest in the forest-savanna mosaic. Four records shown in Hall and Moreau (1970) to the south of Lake Chad are errors (Snow 1978).

RECORDS FROM CAMEROON AND NIGERIA

There is only one record from Cameroon, of a bird collected 25 March 1944 to the north of Yaounde by A.I. Good (Chapin 1953; Good 1953; examination of specimen in Field Museum of Natural History, Chicago (FMNH)). The species was first recorded in Nigeria in 1977 when R.E. Sharland mist-netted a bird in the Nindam Forest Reserve, 5 km south of Kagoro (09° 32'N, 08° 30'E) in Kaduna State (Elgood 1982). These two localities are both in the forest-savanna mosaic zone and appear to be highly isolated from all other populations of the species. It has been suggested that records to the north of the rainforest refer to small numbers of migrant birds (Chapin 1953; Good 1953; Britton 1971; Traylor and Archer 1982). There is now evidence to suggest that this might be at least partially so, and that the species is a migrant, breeding visitor to a very narrow belt along the northern boundary of the rainforest from Nigeria and Cameroon, eastwards to Central African Republic and southern Sudan (Traylor and Archer 1982). All records from this belt, except some from Nigeria, fall between March and August or September, with evidence of breeding in June to August (Friedmann 1978; Traylor and Archer 1982; Dyer et al. 1986). Migrant birds would presumably spend the non-breeding season south of the rainforest belt. The hypothesis that the species breeds widely through this narrow vegetational belt north of the rainforest rests on three pieces of evidence:

1. The occurrence of the species in southern Sudan. The Red-capped Robin-chat is widely reported from southern Sudan, occurring mainly in forests in mountainous and hilly areas in the extreme south and south-east of the

country (Cave and MacDonald 1955). However, the species has also been reported from Bangangai Game Reserve (or Bengengai) (04Z 51'N, 27Z 45'E) (Chapin 1953; Cave and MacDonald 1955; Traylor and Archer 1982; Hillman 1983) and from the Aza Forest (04Z 42'N, 29Z 50'E) (Traylor and Archer 1982). The habitat at Bangangai, which is adjacent to the Zaire border and close to the northern boundary of the rainforest is rainforest-savanna mosaic (Hillman 1983). Birds from Aza Forest were in breeding condition between late June and late August (Traylor and Archer 1982).

2. Records from the Central African Republic. Three specimens were collected in June 1976 in mature riverine forest, 11 km west of Baroua (05Z 20'N, 24Z 20'E) in south-eastern Central African Republic (Friedmann 1978). There is evidence that the species breeds at this locality since the three specimens (two males and one female) all had much enlarged gonads. Traylor and Archer (1982) suggested that these birds were breeding migrants from the south.
3. Observations from Nigeria. Observations of this species in Nindam Forest Reserve between 1977 and 1981 have shown that a breeding population exists at this locality (Dyer et al. 1986). A total of 24 individuals was ringed during that period including many spotted juveniles. On 15 June 1980 a nest containing 3 eggs was found in a hollow of a small forest tree 1.5 m above the ground. It was photographed (see Dyer et al. 1986). In this locality, however, it seems that the population is resident (Dyer et al. 1986), being unrecorded only in January and August.

In the light of these few records, we suggest that breeding populations either resident or migratory, occur elsewhere along the northern boundary of the rainforest in southern Sudan, Central African Republic, Cameroon and Nigeria. In general, there has been very little ornithological exploration of this area. It is likely, therefore, that the populations of the Red-capped Robin-chat in West Africa (Nigeria and Cameroon) are not disjunct from others of the species. It is of course possible that populations such as that at Nindam are recently isolated as a result of habitat clearance.

SUBSPECIFIC IDENTITY

No firm conclusions can be made concerning the subspecific identity of the birds in Cameroon and Nigeria because of the very small number of specimens involved. Comments made here are very tentative in light of a more thorough study on subspeciation in this species being carried out by A. Prigogine. This comparison of specimens was made using the very brief descriptions of the subspecies given in White (1962b) as a guide. SNS has examined A.I. Good's specimen (a female) from Yaounde, and one (unsexed) collected by MEG in Nindam Forest Reserve in 1980. These were compared with specimens at the British Museum (Natural History) (BMNH) at Tring, UK., including the female collected by F.O. from Bangangai in

south-western Sudan. Subspecific variation in this species appears to be slight. Birds from Sudan are usually referred to the race intensa. The specimen from Yaounde is unusually dark on the breast, belly, cap, mantle, rump and upper tail-coverts and in this respect it seems closest to larischi which occurs in Gabon, Congo, southern Zaire and Angola (White 1962b). It is also similar to larischi in its short tail (65 mm) (see White 1962b). The specimens from Nindam Forest Reserve and Bangangai Game Reserve are paler and closest to intensa in colouration. The Nigerian bird is intermediate between intensa and larischi in its tail length (70 mm) but the Bangangai specimen is curiously closest to larischi in this respect with a very short tail (63mm).

Clearly, these comparisons are of little relevance until more specimens can be obtained, and the distribution of the species north of the rainforest belt can be clarified.

CONCLUSION

We predict that future ornithological exploration will show the Red-capped Robin-chat to be widely distributed north of the rainforest belt in Africa in a narrow band in the forest-savanna zone. We suspect that most of these populations are composed of breeding migrants, but more research is needed to confirm this.

ACKNOWLEDGEMENTS

We would like to thank the curator of ornithology at FMNH, Chicago, for sending A.I. Good's specimen of Cossypha natalensis to BMNH, Tring where SNS was able to examine it. We would also like to thank P.R. Colston at BMNH for his assistance, and Dr. P.A. Clancey and Dr. A. Prigogine for their comments on an earlier draft of this paper. SNS is grateful to J.A. McNeely and R.F. Scott for their permission to use facilities at IUCN headquarters, Gland, during the writing of this paper.

SUMMARY

The presence of the Red-capped Robin-chat north of the rainforest belt is discussed and it appears that populations in Cameroon and Nigeria are probably not disjunct from others of the species. It seems that populations to the north of the rainforest are of breeding birds, but more work is needed to show whether they are resident or migratory in origin.

RESUME

La presence nord du foret equatoriale du Cossypha natalensis est discute. Il parait que les populations aux Cameroun et

Nigeria ne sont pas reparees d'autres populations en Afrique de L'ouest. C'est

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S.N. Stuart, Species Survival Commission, IUCN,
Avenue du Mont-Blanc, 1196, Gland, Switzerland

M.E. Gartshore, RR 3, Dundas, Ontario L9H 5E3, Canada

OBSERVATIONS OF BIRDS AND OTHER FRUGIVORES FEEDING AT
TETTORCHIDIUM DIDYMOSTEMON

By Ruth Happel

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Fruit represents an important resource for many birds, and a recent review provided data on frugivory by tropical birds (Snow 1981). I report here observations on feeding competition between avian and mammalian frugivores at fruiting trees of Tetrorchidium didymostemon, a previously unreported food resource for birds. This study was undertaken in 1983 and 1984 at the Botanic Reserve of Fourah Bay College, Freetown, Sierra Leone. The Reserve is adjacent to the campus of Fourah Bay College on Mt Aureol (08 28'N, 13 14'W) and is a type of regenerating secondary forest (Field 1974) in which T. didymostemon is relatively common (Hutchinson and Dalziel 1958).

T. didymostemon produces a large number of fruits per tree, and, being a common tree, produces a large number of fruits in the Reserve as a whole, relative to other trees. I established 65 phenology plots, each 10 by 50 metres, to record plant phenology. I monitored these plots monthly, recording fruit and flower development of all reproductively active plants. A total of 23 individuals of T. didymostemon were present in these plots, and most were reproductively active during my study. On average, trees produced 6500 fruits per year, with a range of c. 700 to c. 40,000 fruits for other trees.

I conducted observations on two adjacent trees c. 3m apart which were large individuals containing about 30,000 fruits each, or 4 to 5 times the average for this species. These observations permitted me to note how this resource was depleted through

The trees were visited by a relatively large number of bird species. A total of 18 bird species were observed feeding on fruits from this tree, representing a wide taxonomic array: Turtur afer, Tockus fasciatus, Pogoniulus bilineatus, P. scolopaceus, P. subsulphureus, Oriolus brachyrhynchus, Corvus albus, Pycnonotus barbatus, Andropadus gracilirostris, Baeopogon indicator, Chlorocichla simplex, Anthreptes collaris, Nectarinia olivacea, Zosterops senegalensis, Ploceus nigerrimus, P. nigricollis, Nigrita bicolor and N. canicapilla. The fruits of these trees were also eaten by squirrels Heliosciurus rugobrachium and monkeys Cercopithecus campbelli.

When actively eating fruits from a productive branchlet, squirrels and monkeys ate approximately 12 fruits/min (N=11,

s.d.=2.4) while birds of all sizes on average ate only 5 fruits/min (N=15, s.d.=2.1). That is because birds ate only ripe, dehiscent fruits, and thus had longer search times to find acceptable fruits. However, because of their apparently greater total biomass birds probably remove a larger total number of fruits than either squirrels or monkeys.

It also appeared that birds were the only seed dispersers for this plant. The fruits are dehiscent, but both squirrels and monkeys ate the fruits before they dehisced, discarding the skin and flesh, eating only the seeds. They acted as seed predators, chewing and digesting the seeds, which did not appear in the faeces of both either captive or free-ranging animals. Birds ate only the dehiscent fruits, and swallowed the flesh and seeds whole, defaecating the seeds intact. Therefore, birds, but not squirrels and monkeys, may be important in ensuring the reproductive success of this plant.

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Ruth E. Happel
Dept. of Anthropology, Peabody Museum, Harvard University
Cambridge MA 02138, USA

REVISED LIST OF SOUND RECORDED AFROTROPICAL BIRDS

by C. CHAPPUIS

(Continued from Malimbus 8(1): 25-39)

PITTIDAE

- Pitta angolensis 78.
 " reichenowi 78.

ALAUDIDAE

- Mirafra cantillans 78. LEM, Mc VIC.
 " pulpa Mc VIC.
 " albicauda LEM, Mc VIC.
 " hypermetra CHA, LEM.
 " africanoides 74.
 " poecilosterna LEM.
 " cheniana 72. 74. 75. 81.
 " passerina 74. GIB.
 " apiata 74. 81.
 " angolensis FITZ.
 " sabota 72. 74. 75. 81. CHA, STJ.
 " chuana FITZ. 77. GIB.
Pinarocorys erythropygia (Mirafra erythro-
 pygia) 78.
Heteromirafra ruddi (Mirafra ruddi) FITZ. 79.
 GIB.
Certhilauda somalica (Mirafra somalica) Mc VIC.
 " albescens (Mirafra albescens) FITZ.
 74. GIB.
 " curvirostris (Mirafra curvirostris)
 FITZ. 74. GIB.
 " albofasciata (Chersomanes albofas-
 ciata) FITZ. 74. GIB. LUT.
Alaemon alaudipes 73. 78.
Ammomanes cinctura 73. 78.
 " deserti 73. 78.
 " dunni (Calandrella dunni) 78.
 " grayi FITZ. 79. GIB.
Galerida cristata 78.
Helicocorys modesta (Galerida modesta) 78.
Eremopterix leucotis 78. Mc VIC.
 " nigriceps 78.
 " signata Mc VIC.
 " leucopareira Mc VIC.
 " verticalis GIB.
 " australis GIB.

TIMALIIDAE

Melanocorypha bimaculata 73. CHA.
Calandrella rufescens 62. 73.
 cinerea 62. 73. 77.
Spizocorys conirostris (Calandrella conirostris) 72. 75.
 starki (Calandrella starki) GIB.
Botha fringillaris (Calandrella fringillaris) 79. GIB.
Calendula magnirostris (Galerida magnirostris) 72. 74. 75. GIB.
Eremophila bilopha 60. 62. 73. 78.

MOTACILLIDAE

Motacilla aquimp 74. 78. 81.
 alba 62. 73. 78.
 clara 72. 78.
 capensis 72. 74. 81. LEM, Mc VIC.
 cinerea 62. 73. 78.
Budytes flavus COR. 62. 73.
Anthus campestris 62. 73. 78.
 similis 72. 75. 77. 78. GIB, Mc VIC.
 leucophrys COR. 74. 78. GIB, LEM, Mc VIC.
 vaalensis STJ.
 pallidiventris 78.
 novaezeelandiae 74. 78.
 trivialis COR. 62. 73. 78.
 brachyurus GIB.
 melindae Mc VIC.
 cervinus 62. 73. 78. Mc VIC.
 caffer 74. GIB.
 crenatus 74. GIB.
 lineiventris 72. 74. 75. 81.
 chloris 72. 75.
Macronyx capensis 72. 74. 75. 81.
 croceus 58. 72. 74. 78. 81.
 fülleborni CHA, MOY.
 ameliae 79. GIB.

Turdoïdes reinwardi BBC
 leucopygia 77. CHA, GIB, LEM, MUJ.
 bicolor 72. 74. CHA, GIB, LUT. STJ.
 gymnogenys GIB.
Lioptilus nigricapillus 72. 75. 77. GIB.
Ptyrticus turdinus ASP.
Trichastoma rufipennis COR.
 fulvescens COR.
 albipectus COR.
 poliothorax Mc VIC.
 pyrrhopterum COR.

PYCNONOTIDAE

Pycnonotus capensis 74. 81.
 nigricans 74. GIB, HEL, LUT, ROC.
 xanthopygus 66.
 tricolor (Pycnonotus barbatus tricolor) BBC.
 barbatus 63. 69. 72. 73. 74. 75. 81. 85.
Criniker barbatus COR.
 calurus COR.
 olivaceus COR.
Bleda syndactyla COR. HOK, Mc VIC.
 eximia COR.
Thescelocichla leucopleura BBC.
Ixonotus guttatus COR.
Phyllastrephus terrestris 72. 74. 75.
 flavostriatus 74.
 alfredi (Phyllastrephus flavostriatus alfredi) LEM.
 debilis Mc VIC.
 fulviventris COR.
 cerviniventris CHA, Mc VIC. MOY.
 poliocephalus CHA.
 icterinus COR.
 baumanni Mc VIC.
Suaheliornis kretschmeri (Macrosphenus kretschmeri) 32.

Arizelocichla nigriceps (Pycnonotus tephrolaema)
LEM, Mc VIC, PAR.
" milanijensis (Pycnonotus milanien-
sis) 74.
" masukuenis (Pycnonotus masukuen-
sis) LEM, Mc VIC.
Chlorocichla flaviventris 72. 74. 75.
Andropadus gracilis (Pycnonotus gracilis) Mc VIC.
" ansorgei (Pycnonotus ansorgei) HOR.
Mc VIC.

MUSCICAPIDAE

Muscicapa striata 62. 73. 79. GIB, GIL.
" gambagae Mc VIC.
" albicollis (Ficedula albicollis) 62.
73.
" hypoleuca (Ficedula hypoleuca) 62. 73.
Alseonax adustus, (Muscicapa adustus) 72. 74. 75.
" cinereus, Muscicapa caerulescens 72.
74.
" griseigularis (Myoparus griseigu-
laris) 32.
Parisoma plumbeum (Myoparus plumbeum) 74.
" lavardi 72. 74. 75. GIB, ROC.
" lugens HOR.
Bradornis mariguensis 74. GIB.
" pallidus 72. 74. 75 GIB.
" infuscatus 74. GIB.
" microrhynchus PAR.
Dioptrornis fischeri PAR.
" chocolatinus (Melaenornis choco-
latinus) CHA, Mc VIC.
Melaenornis pammelaina 74. GIB, Mc VIC, MOY.
Sigelius silens (Melaenornis silens) 74.
Impidornis semipartitus PAR. Mc VIC.
Pedilorhynchus comitatus (Muscicapa comitatus)
COR.
Artomyias fuliginosa COR.
Chloropeta natalensis 20. 72. 74. 75.
Chloropetella holochlora (Erythrocerus holo-
chlora) HOR.

Erythrocerus mcallii COR.
Stizorhina fraseri (Neocossyphus fraseri) COR.
Batis capensis 72. 74. 75. 81.
" molitor, soror 74. GIL.
" pririt 74. GIB, LUTG.
" fratrum COR. 72. 74. 75.
" diops COR.
" minima COR.
Platysteira peltata 74.
Dyaphorophya castanea (Platysteira castanea)
34.
" concreta (Platysteira concreta)
32. HOR, Mc VIC.
" blissetti (Platysteira blissetti)
COR. HOR, Mc VIC.
" tonsa (Platysteira tonsa) COR.
" jamesoni Mc VIC.
Stenostira scita 74. GIB.
Elminia albicauda (Erannornis albicauda) MOY.
Trochocercus cyanomelas 72. 74. 75
" albonotatus COR. 77.
" nitens COR.
" nigromitratus COR.
Ichitrea rufiventer COR. HOR.

TURDIDAE

Turdus ericetorum (Turdus philomelos) 62. 73.
" olivaceus COR, FITZ. 14. 72. 74. 75. 81.
GIL, HOR, LEM, MOY, ROC, STAN, WALK.
" libonyanus 72. 74. 75. 81.
" abyssinicus 32. CHA, KEI.
Geokichla gurneyi (Zoothera gurneyi) COR. 72.
74. 75.
" oberländeri (Zoothera oberländeri) 32.
" piaggiae (Zoothera piaggiae) COR. 32.
Psophocichla guttata (Zoothera fischeri) 74.
GIB, GIL, Mc VIC.
" litsipsirupa (Turdus litsipsirupa)
74. 81. CHA, GIB, LUTG, MOY.
Monticola rupestris 72. 74. 75. 81. GIB, ROC.
" brevipes GIB.
" angolensis CHA.

Pogonocichla swynnertoni 74. CHA, KEI, STJ.
Phoenicurus phoenicurus 62. 73.
 " ochruros 62. 73.
Cyanosylvia svecica (Luscinia svecica) 62. 73.
Irania gutturalis 73. Mc VIC.
Luscinia luscinia 62. 69. 73. 77.
 " meqarhynchos 62. 73.

SYLVIIDAE

Sylvia communis 62. 73. 74.
 " conspicillata 62. 73.
 " borin 62. 73. 74.
 " atricapilla 62. 73. Mc VIC.
 " hortensis 62. 73.
 " curruca 62. 73.
 " rüppelli 63.
 " melanocephala 62. 73.
 " cantillans 62. 73.
 " nana 73.
 " nisoria 62. 73.
Aqrobates galactotes (Cercotrichas galactotes) 62. 73.
Hippolais icterina 62. 73. 74. GIB.
 " olivetorum 62. 72. 73. 74. 75. GIB, Mc VIC.
 " languida Mc VIC.
 " pallida HOR.
 " polyglotta 62. 73.
Cettia cetti 62. 73.
Luscinia melanopogon (Acrocephalus melanopogon) 62. 73.
Locustella fluviatilis 62. 73. Mc VIC.
 " luscinioides 62. 73.
 " naevia 62. 73. Mc VIC.
Acrocephalus arundinaceus 62. 72. 73. 74. 75.
 " scirpaceus 62. 73. Mc VIC. STJ.
 " palustris 62. 72. 73. 74. 75.
 " baeticatus 74.
 " schoenobaenus 62. 73.
 " dumetorum (Acrocephalus baeticatus) 62. 73.
 " dumetorum 62. 73.
 " paludicola 73.

Monticola saxatilis 62. 73.
 " solitaria 62. 73.
Genanthe oenanthe 63. Mc VIC.
 " isabellina 62. 73. Mc VIC.
 " bifasciata 79. GIL.
 " monticola 74. GIB, HELB, ROC.
 " pileata 77. GIL, LUTG, Mc VIC.
 " tractrac (Cercomela tractrac) GIB.
 " xanthoprymna CHA.
 " lugens Mc VIC.
 " pleschanka 62. 73. Mc VIC.
Cercomela familiaris 77. CHA, GIB, HELB, MOY.
 " scotocerca Mc VIC.
Emarginata sinuata (Cercomela sinuata) GIB.
 " schlegelii (Cercomela schlegelii) GIB.
Chaëtrops frenatus 77. GIB.
Pinarornis plumosus CHA.
Thamnotaea ernotti (Myrmecocichla ernotti) 35. CHA.
Myrmecocichla bifasciata 72. 74. GIB, ROC.
 " formicivora 72. 74. 81. GIB, LUTG, ROC.
Saxicola torquata 74.
 " rubetra 62. 73. Mc VIC.
Cossypha polioptera Mc VIC.
 " archeri (Dessonornis archeri) COR.
Modulatrix stictiqula LEM.
Tychaëdon signata (Cercotrichas signata) 72. 74. 75. GIB, ROC.
Dessonornis anomala LEM.
Sheppardia gunningi LEM, Mc VIC.
 " sharpei LEM.
 " aequatorialis HOR.
Alethe poliocephala COR. Mc VIC.
 " fülleborni 77. GIL, LEM.
 " choloensis LEM.
Cichladusa arguata 35.
 " ruficauda COR.
Erythropygia paena 35. 74. GIB, LUTG.
 " coryphaea (Cercotrichas coryphaea) 72. 74. 75. GIB, GIL.
Pogonocichla stellata 72. 74. 75.

<u>Acrocephalus griseldis</u> (Arundinaceus griseldis)	
Mc VIC.	
<u>Bradypterus baboeculus</u>	72. 74. 75. 81.
" <u>victorini</u>	COR. 72. 75. GIB. LEM.
" <u>sylvaticus</u>	COR. 72. 75. GIB.
" <u>barrati</u>	72. 74. 75.
<u>Euryptila subcinamomea</u>	GIB.
<u>Calamocichla gracilirostris</u> (Acrocephalus gra-	
<u>cilirostris</u>)	74. 75. 81.
" <u>rufescens</u> (Acrocephalus rufescens)	
Mc VIC.	
" <u>leptorhyncha</u> (Calamocichla graci-	
<u>lirostris leptorhyncha</u>)	Mc VIC.
<u>Phylloscopus trochilus</u>	62. 73. 74. 81.
" <u>collybita</u>	62. 73.
" <u>sibilatrix</u>	62. 73.
" <u>bonelli</u>	62. 73.
<u>Seiurus ruficapillus</u>	72. 74. 75.
<u>Calamonastes fasciolatus</u> (Camaptera fascio-	
<u>latus</u>)	72. 74. GIB. LUTG.
" <u>stierlingi</u> (Camaptera stierlingi)	
72. 74. CHA, GIB, GIL, LEM.	
<u>Schoenicola brevirostris</u> (Schoenicola platyura)	
COR. 72. 74. 75. GIB, GIL, MOY, Mc	
VIC, STJ.	
<u>Sphenoeacus afer</u>	72. 74. 75. 81. CHA, GIB, GIL,
LEM, ROC, STJ.	
<u>Apalis thoracica</u>	20. 72. 74. 75. 81. CHA, GIB,
LEM, Mc VIC, PAR.	
" <u>flavida</u>	72. 74. 75. 81.
" <u>ruddi</u>	72. 74. 75. GIB, GIL, ROC.
" <u>bamendae</u>	68.
" <u>ruwenzorii</u>	COR.
" <u>binotata</u>	COR. 68. CHA, ERA, KEI, Mc VIC.
" <u>nigriceps</u>	COR.
" (sharpii) <u>chapini</u>	LEM.
" (melanocephala) <u>chiridensis</u>	32. CHA, KEI.
" <u>chariessa</u>	LEM.
" <u>rufifrons</u> (Spiloptila rufifrons)	STJ.
<u>Eminia lepida</u>	34. 66.
<u>Phyllolais pulchella</u>	PAR, STJ.
<u>Sylvietta whytii</u>	HOR.
<u>Sylvietta rufescens</u>	72. 74. 75. 81.
" <u>virens</u>	COR. Mc VIC, STJ.
" <u>brachyura</u>	LEM, STJ.
" <u>leucophrys</u>	COR.
" <u>isabellina</u>	Mc VIC.
<u>Eremomela icteropygialis</u>	74. GIB, GIL, HOR,
MOY.	
" <u>gregalis</u>	GIB.
" <u>scotops</u>	77
" <u>usticollis</u>	74. CHA, GIB, GIL, LUTG.
" <u>turneri</u>	COR. Mc VIC.
<u>Cisticola juncidis</u>	72. 74. 75. 81.
" <u>dambo</u>	STJ.
" <u>aridula</u>	74.
" <u>textrix</u>	74. GIB.
" <u>ayresii</u>	74.
" <u>brunnescens</u>	74.
" <u>subruficapilla</u>	74. GIB, GIL.
" <u>lais</u>	72. 74. 75.
" <u>rufilata</u>	79.
" <u>bodessa</u>	LEM, Mc VIC.
" <u>woosnami</u>	34.
" <u>galactotes</u>	74.
" <u>pipiens</u>	35. 77.
" <u>fulvicapilla</u>	20. 72. 74. 75. 81.
" <u>aberdare</u>	Mc VIC.
" <u>natalensis</u>	72. 74. 75.
" <u>tinniens</u>	72. 74. 75. 81.
" <u>aberrans</u>	72. 74. 75. GIB, GIL, MOY.
" <u>nigriloris</u>	LEM.
<u>Prinia subflava</u>	35. 74. 81.
" <u>robertsi</u>	CHA, STJ.
" <u>flavicans</u>	72. 74. 75. 81. CHA, GIB,
LUTG.	
" <u>maculosa</u>	72. 74. 75. 81. GIB, LEM.
" <u>substriata</u>	74. GIB.
" <u>pectoralis</u>	74. GIB.
<u>Achaetops pycnopygius</u> (Sphenoeacus pycno-	
<u>pygius</u>)	35. 77. GIB, GIL.

Hirundo rustica 62. 73. 74.
 " angolensis COR.
 " albigularis 74.
 " smithii MOY.
 " daurica COR. 62. 73. LEM, MOY.
 " senegalensis (Cecropis senegalensis) 79.
 " semirufa (Cecropis semirufa) COR. 77. GIB, MOY.
 " cucullata (Cecropis cucullata) 74. 81. GIB, GIL, LUTG.
 " abyssinica (Cecropis abyssinica) 72. 74. 81.
 " griseopyga (Pseudohirundo griseopyga) GIB, MOY.
 " aethiopica Mc VIC.
Petrochelidon spilodera GIB.
Riparia riparia 62. 73.
 " paludicola 74. GIB.
 " cincta 74. GIB, Mc VIC.
Ptyonoprogne rupestris 62. 73.
 " fuligula 79. GIB, GIL, Mc VIC. MOY.

Delichon urbica 62. 73.
Psalidoprocne holomelaena GIB.
 " orientalis CHA, STJ.
 " albiceps Mc VIC.
 " pristontera Mc VIC.
 " nitens COR.
 " fuliginosa COR. DYER.

CAMPAPHAGIDAE

Campephaga sulphurata (Campephaga flava) PAR.
 " quiscalina HOR.
 " phoenicea 74. GIB, MOY, ROC, STJ.
Coracina pectoralis CHA.
 " caesia 20. 79. GIB, GIL.
 " azurea COR.

DICRURIDAE

Dicrurus modestus HOR.
 " ludwigi 72. 74. 75. 81.

PRIONOPIDAE

Prionops plumata 72. 74. 75.
Sigmodus retzii 72. 74. 75.
 " scopifrons HOR.

LANIIDAE

Eurocephalus anquiritimens 74.
Nilaus afer 72. 74. 75. 81.
Lanius minor 62. 73. 74. GIB, Mc VIC.
 " collaris 72. 74. 75. 81.
 " mackinnoni COR. HOR.
 " collurio 62. 73. 74.
 " nubicus 62. 73.
 " senator 62. 73.
 " excubitor 62. 73.
 " dorsalis Mc VIC.
 " cabanisi HOR.

Urolestes melanoleucus 72. 74. 75.
Laniarius bicolor 72. 74. 75. CHA, GIB, GIL.

" erythrogastr 84.
 " mufumbeli Mc VIC.
 " fulleborni COR. LEM.
Dryoscopus cubla 72. 74. 75. 81.
 " angolensis COR. Mc VIC.
Ichagra tchagra 72. 74. 75. GIB.
 " australis 58. 74.

Bocagia minuta COR.

Chlorophoneus olivaceus (Telophorus olivaceus) 72. 74. 75. 81.
 " multicolor (Telophorus multicolor) Mc VIC.
 " nigrifrons (Telophorus nigrifrons) 74.
 " rubiginosus COR.

cinnyricinclus femoralis (Cinnyricinclus femoralis)
Mc VIC.

Speculipastor bicolor Mc VIC.
Lamprocolius
(Lamprotornis) nitens 72. 74. 75. 81.
" chalybaeus 74.
" chloropterus 74.
" corruscus 72. 74. 75.
" purpureiceps COR.

Lamprotornis mevesii 74.
" australis 72. 74.
" purpureopterus 66
Heteropsar acuticaudus (Lamprotornis acuti-
caudus) ASP, STJ.

Cosmopsarus unicolor PAR.
Onychognathus nabouroup 35. 74. GIB.
" morio 72. 74. 75. 81.
" tenuirostris COR. CHA.

Galeopsar salvadorii (Onychognathus salva-
dorii) Mc VIC.

Poeyoptera lugubris COR.

Spree bicolor 74. GIB, ROC.
" shelleyi CHA. Mc VIC.

" superbus 19 66.
Buphaqus africanus BBC. HOR.

" erythrorhynchus 74.
Picathartes gymnocephalus BBC.

ZOSTEROPIDAE

Zosterops senegalensis 77
" pallidus 72. 74. 81. GIB, Mc VIC.
" abyssinicus HOR, Mc VIC.
" kikuyuensis (Zosterops senegalensis)
HOR, PAR.

NECTARINIIDAE

Nectarina famosa 74. 81. GIB, GIL, LEM.
" johnstoni BBC. LEM.
" purpureiventris COR
" erythrocerca Mc VIC.
" pulchella HOR.

viridis (Malaconotus viridis) STJ.
Malaconotus gladiator (Telephorus gladiator)
STUART (BLOWS)

Nicator gularis (Nicator chloris) 72. 74.
75. GIB.

" vireo COR.
Lanioturdus torquatus 74. GIB.

PARIDAE

Parus afer 72. 74. 75. 79.
" niger BBC. 72. 74. 75. 81. GIB, GIL,
LEM.

" leucomelas 58.
" rufiventris CHA, MOY.
" fasciiventris COR.
" fringillinus Mc VIC.

Anthoscopus minutus 74. GIB, LUTG.
" caroli 74. CHA, GIB, GIL, Mc VIC.
" parvulus MOR.
" flavifrons 68. ERA.
" musculus Mc VIC.

ORIOLIDAE

Oriolus oriolus 62. 73. 77.
" auratus 34.
" chlorocephalus HOR, LEM.

CORVIDAE

Corvus albus 66. 74. 81.
" capensis 72. 74.
Corvultur albicollis 74.

STURNIDAE

Sturnus vulgaris 62. 73. 74. 81.
Creatophora cinerea 74.
Acridotheres tristis 72. 74. 75. 81. GIB.
Cinnyricinclus leucogaster 74.

PROMEROPIIDAE

Promerops cafer 74. 81. GIB, GIL.
" gurneyi CHA, GIB, STJ.

CERTHIIDAE

Salpornis spilonota HOR.

PLOCEIDAE

Bubalornis niger 74. GIL.
" albirostris 72. 75.
Plocepasser donaldsoni LEM
Philetairus socius 72. 74. 75. GIB, LUTG.
Histurgops ruficauda PAR.
Pseudonigrita cabanisi Mc VIC.
Passer domesticus 63. 72. 74. 75. 81.
" melanurus 72. 74. 75. 81.
" griseus 66. 74.
" diffusus 72. 75. GIB.
" hispaniolensis 63.
" motitensis 74. GIB, Mc VIC.
Sorella emini Mc VIC.
Petronia supercilii 72. 74. 75.
" xanthosterna (Petronia pyrgita) HOR.
Sporopipes squamifrons 74. CHA, GIB, LUTG,
STJ.
Ploceus capensis 72. 74. 75. 81. GIB, ROC.
" cucullatus 74. 85.
" intermedius CHA, GIB, LEM.
" velatus 72. 74. 75. 81.
" melanocephalus Mc VIC.
" xanthopterus 77. GIL, HOR.
" castaneiceps PAR.
" jacksoni STJ.
" capitalis (Ploceus melanocephalus)
Mc VIC.
" luteolus CHA, Mc VIC.
" golandi Mc VIC.
" taeniopterus Mc VIC.
Hypphanturgus ocularis (Ploceus ocularis) 74.

Anthobaphes violacea (Nectarinia violacea)

GIB, LEM.

Drepanorhynchus reichenowi (Nectarinia reichenowi) CHA.

Cinnyris

(Nectarinia) superbus CUR.
" cupreus COR.
" bifasciatus COR. 72. 74. 75. GIB.
" mariquensis COR. 72. 74. 75.
" shellei STJ.
" oustaleti MOY.
" afer (Nectarinia afra) 20. 74. 81.
GIB, LEM.
" chalybeus COR. 72. 74. 75.
" fuscus 77. GIB, ROC.
" neergaardi 79. GIB.
" reichenowi 66
" pembae Mc VIC.
" chalomelas Mc VIC.
" regius COR.
" minullus COR.
" ludovicensis Mc VIC.
" preussi CHA.

Chalcomitra fuliginosa (Nectarinia fuliginosa)

COR.

" amethystina (Nectarinia amethystina) 74. 81.
" rubescens (Nectarinia rubescens) COR. HOR.

" senegalensis (Nectarinia senegalensis) 66. 72. 74. 75.
Cyanomitra verticalis (Nectarinia verticalis) COR. LEM, MOY.

" olivacea (Nectarinia olivacea) 72. 74. 75. 81.

" cyanolaema (Nectarinia cyanolaema) COR.

Anthreptes collaris 72. 74. 75.

" longuemarei HOR, MOY.

" orientalis Mc VIC.

" anchietae CHA, STJ.

" halligaster HOR. Mc VIC.

- Spermopnaga furicapilla COR. MOR.
Amadina fasciata Mc VIC.
Cryptospiza reichenovii COR.
" salvadorii Mc VIC.
" jacksoni COR
Ortyospiza atricollis 74. 81. GIB, LEM.
" gabonensis MOY.
Hypargos margaritatus 79. GIB.
" niveoguttatus LEM.
Mandingoa nitidula COR. GIB, Mc VIC.
Pytilia afra CHA.
" melba 74. GIB, LEM, Mc VIC, MOY.
Lagonosticta rubricata COR. 74. 81. CHA.
" GIB, GIL, LEM, Mc VIC, MOY.
" senegala 74.
" nitidula GIB, LEM.
Coccyzygia melanotis (Estrilda melanotis)
" GIB, MOY.
Estrilda astrild 73. 74. 81.
" melpoda COR.
" paludicola MOY.
" perreini GIB.
" erythrionotos 74. GIB, GIL, LUTG,
" Mc VIC.
" subflava (Amanda subflava) COR. MOY.
" nonnula COR.
" atricapilla COR.
Nesocharis capistrata COR.
Uraeginthus angolensis 74. 81.
Granatina granatina GIB, LUTG.
Hypochera chalybeata (Vidua chalybeata) 74.
" funerea (Vidua funerea) 72. 77.
" GIB, GIL.
Vidua macroura 74. 81.
" regia 74. GIB.
Steganura paradisae Mc VIC, STJ.
" orientalis Mc VIC.
FRINGILLIDAE
Fringilla coelebs GIB.
Bucanates githagineus (Rhodopechys githa-
gineus) 62. 73.
77.
Othophantes baglafecht HOR, LEM, Mc VIC.
Pachyphantes superciliosus (Ploceus supercilio-
sus) COR. Mc VIC.
Xanthoploceus bertrandi (Ploceus bertrandi)
CHA.
Melanopteryx nigerimus (Ploceus nigerimus)
Mc VIC.
Malimbus rubricollis COR.
" cassini COR.
Amblyospiza albifrons 72. 75. 77.
Anaplectes melanotis (Ploceus rubriceps) 74.
77.
Quelea quelea 74.
" erythrops HOR, Mc VIC.
" cardinalis HOR.
Euplectes orix 74.
" hordeacea COR.
" gierowii COR.
" capensis 74.
" afra 20. 74.
Coliuspasser axillaris COR. 74. GIB, GIL.
" macrourus GIB.
" albonotatus GIB. LEM, Mc VIC,
STJ.
" hartlaubi ASP, LEM.
" ardens 74.
" progne 72. 74. GIB, GIL, Mc VIC,
STJ.
Spermestes cucullatus (Lonchura cucullatus) 79.
" poensis COR. GIB.
Amauresthes fringilloides (Lonchura fringil-
loides) COR. Mc VIC.
Spermestes nigriceps (Lonchura bicolor) Mc VIC.
Euodice malabarica (Lonchura malabarica)
Mc VIC.
Lonchura griseicapilla Mc VIC.
Odontospiza caniceps (Lonchura bicolor) Mc VIC.
Nigrita canicapilla COR.
" fusconota HOR.
" bicolor Mc VIC.
Euschistospiza dybowskii CHA.

EMBERIZIDAE

<u>Serinus mozambicus</u>	74. 81.
" <u>flaviventris</u>	74. GIB, LUTG.
" <u>sulphuratus</u>	COR. 73. GIB, MOY.
" <u>scotops</u>	72. 74. 75. GIB, LEM.
" <u>canicollis</u>	20. 72. 74. 75. 81.
" <u>gularis</u>	74. 81.
" <u>gularis reichardi</u>	CHA, Mc VIC, STJ.
" <u>leucopterus</u>	77. GIB, GIL.
" <u>atroquularis</u>	74.
" <u>alboquularis</u>	74. GIB.
" <u>burtoni</u>	HOR, Mc VIC.
" <u>donaldsoni</u>	Mc VIC.
" <u>koliensis</u>	Mc VIC.
<u>Alario alario</u> (Serinus alario)	74. 77. 79. GIB, GIL.
<u>Linurqus olivaceus</u>	PAR.
<u>Carduelis citrinelloides</u> (Serinus citrinel-	
loides)	COR. LEM, MOY.
" <u>tottus</u> (Serinus tottus)	GIB.
<u>Emberiza cabanisi</u> COR. MOY.	
" <u>flaviventris</u>	72. 74. 81.
" <u>forbesi</u>	STJ.
" <u>hortulana</u>	62. 73.
" <u>caesia</u>	62. 73.
" <u>cia</u>	62. 73.
" <u>orientalis</u> (Emberiza cabanisi)	CHA.
" <u>poliopleura</u>	LEM, STJ.
" <u>cineracea</u>	62.
<u>Fringillaria tahapisi</u>	74.
" <u>impetuani</u> (Emberiza impetuani)	
"	74. GIB, HOC.
" <u>capensis</u> (Emberiza capensis)	
"	72. 74. GIB.

NOTES ON THE BIRDS OF IVORY COAST

by J. Frank Walsh

Recently Thiollay (1985) has provided a fairly comprehensive account of the birds of Ivory Coast. However, as he points out in his introduction much remains to be learnt concerning their detailed distribution, and the changes which are currently taking place. In particular the northwest of the country has been somewhat neglected by ornithologists.

Since 1973 I have made numerous short visits to the northern half of the country, during which over 250 species of birds have been recorded. Three visits yielded the bulk of the useful observations. These were:

- i. A short stay under canvas near Leraba Gare (10° 06'N, 05° 05'W), just south of the Burkina Faso border in the Leraba valley, from 19 to 24 February 1977, which gave an opportunity to observe the northernmost area of Ivory Coast at the height of the dry season.
- ii. Stays at the Gouesesso Hotel, near Biankouma (07° 52'N, 07° 40'W) on 23/24 November 1984 and 9 to 11 March 1985; this hotel, in a village setting, in a patch of relict forest cum coffee plantation, must be one of the best possible for the bird-watcher in West Africa.
- iii. A stay in Odienne (09° 36'N, 07° 32'W) from 18 February to 24 March 1985 proved very interesting. To the west of the town there is a small barrage, well vegetated and not much disturbed, while within the town itself there is a small valley with 4 or 5 hectares of paddy rice and vegetable gardens, both sites were very productive.

Observations which add to the data given by Thiollay (1985), or which concern species listed in Appendix G in Collar & Stuart (1985) are given below. To reduce duplication, lists are given for Leraba Gare, Gouesesso and Odienne rice paddy without further details. Other observations are dealt with in a systematic list.

Among the birds seen in the vicinity of Leraba Gare the following are perhaps worthy of note:

Neotis denhami, Merops hirundineus, Jynx torquilla, Eremopterix leucotis, Hirundo smithii (pair occupying nest under road bridge), H. griseopyga, Nilaus afer, Apalis flavida (caniceps), Parisoma plumbeum, Anthreptes gabonica (3 birds showing territorial behaviour), A. platura, Ploceus nigricollis, Petronia dentata, Pytilia phoenicoptera, Estrilda larvata, Lagonosticta rufopicta (the commonest of the fire finches) and L. rara.

Among the more notable of the 73 species of birds seen at Gouesesso were:

Francolinus achantensis (numerous and noisy in November but not heard or seen in March), Psittacus erithacus, Corythaeola cristata, Eurystomus glaucurus and E. gularis (perched in same dead tree in March), Phoeniculus aterrimus, Gymnobucco calvus, Dendropicos gabonensis, Psalidoprocne obscura (March), Lamprotornis iris (November), Hyliota violacea (November), Nectarinia adelberti, N. venusta, N. superba, Ploceus nigerrimus and Lonchura bicolor.

Between 19 February and 23 March visits were paid to the Odienne rice paddy area on 13 mornings. The total bird/days for each species of the Charadriiformes is given below:

Actophilornis africana 5

Charadrius dubius 7

Tringa nebularia 1

T. glareola 137

T. ochropus 5

T. erythropus 1 (14.3.85)

Gallinago media 9

G. gallinago 2

Calidris ferruginea 1 (19.3.85)

C. minuta 3

Philomachus pugnax 12 (1 to 4 birds present on 5 days).

Rostratula benghalensis 1

Glareola pratincola 5

Sterna leucoptera 12

SYSTEMATIC LIST

Egretta gularis Reef Heron See Walsh (in press) for inland records

Egretta intermedia Yellow-billed Egret 1 Odienne lake
1.3.85

Ardea goliath Goliath Heron 2 Comoe Parc 16.7.75, 5 on
22.6.76

Ephippiorhynchus senegalensis Saddlebill Stork Seen in Comoe Parc in March, May, July and December. Published breeding records (Walsh J.F. 1977) overlooked by Thiollay.

Ibis ibis Yellow-billed Stork 1 with woolly-necked Storks
Ciconia episcopus in Comoe Valley 08°30'N, on 4.12.75

Pteronetta hartlaubi Harlaub's Duck 1 pr on Comoe at 08 22'N on 22.6.76, 3 pr on Sassandra river between 07°50'N and 08°26'N on 2.3.85.

Anas querquedula Garganey 4 pairs at Odienne dam 16.3.85

Falco cuvieri African Hobby Near Touba (08° 22'N, 07° 42'W) on 6.3.85

Falco subbuteo European Hobby 1 at Odienne 16 & 17.3.85

Falco alopex Fox Kestrel 1 near Odienne on 24.2.85

Glareola nuchalis Rock Pratincole Many on White Bandama between 08° 00'N and 08° 14'N (none further north) on 22.7.75; several Comoe river at 08° 22'N and 07° 58'N on 16.7.75, also on Nzi river in June 1979 and on the Cavally river at 06° 03'N on 31.5.79

Sterna leucoptera White-winged Black Tern Several present Odienne dam from 23 February to 17 March 1985, maximum 10 birds

Rynchops flavirostris African Skimmer 4 on Sanssandra river between 07° 50'N and 08° 26'N on 2.3.85

Oena capensis Masked Dove 1 male seen near Odienne on 17.3.85

Poicephalus robustus Brown-necked Parrot Flock of 5 birds seen at the Nzi river 08° 11'N on 20.10.74; 2 over the Bondoukou-Bouna road at about 08° 30'N on 31.12.74

Cuculus gularis Grey Cuckoo Regularly heard and seen at Odienne lake from 23 February to 23 March, at least 3 individuals calling on latter date, suggests breeding activity likely

Riparia riparia European Sand Martin 1 single bird in Odienne town on 19.3.85, following a period of exceptional harmattan dust

Luscinia svecica Bluethroat A male, subspecies not determined, seen in vegetable gardens at Odienne on 26.2.85 constitutes the FIRST RECORD of this species in Ivory Coast

Cercomela familiaris Familiar Chat A bird seen carrying material in beak on four journeys at a small inselberg near Odienne on 24.2.85 was presumably nesting

Acrocephalus schoenobaenus Sedge Warbler This species was seen on 12 of 13 visits to the Odienne rice paddy, between 19 February and 23 March 1985, the maximum number recorded being 8 on 26 February, in all 54 bird days recorded. This species, for which Thiollay (1985) could give only one record, must occur at the many rice paddies scattered about the savanna zone, and probably overwinters there in important numbers as it does in Ghana (Walsh & Grimes 1981).

Muscicapa aquatica Swamp Flycatcher 1 on the Kolonkoko tributary of the Comoe river at 09°12'N, 04°27'W on 23.1.75

Ploceus nigricollis Spectacled Weaver 1 female at 09°54'N, 05°01'W on 24.1.75; several at Odienne dam 1.3.85

Malimbus rubriceps Red-headed Weaver 3 fresh nests with 1 male seen visiting at 09°54'N, 05°01'W on 24.1.75; a pair seen visiting a nest near Odienne on 24.2.85, with another fresh nest seen the same day, about 5 km away

Petronia dentata Bush Sparrow A few in Odienne area in February and March 1985; 1 single bird at Touba airfield on 13 March

Nesocharis capistrata White-cheeked Olive-weaver 1 at Odienne dam on 3.3.85

Pytilia pheonicoptera Red-winged Pytilia 1 pair at Odienne dam 16.3.85

Estrilda larvata Black-faced Firefinch 1 male near Odienne 17.3.85

Lagonosticta rufopicta Bar-breasted Firefinch Several at Kafolo village (09°36'N, 04°19'W) on 24.7.75

Lagonosticta rara Black-bellied Firefinch Seen at Odienne dam on 16.3.85 and 7 km west of Odienne on 17.3.85

SUMMARY

As a supplement to the check-list of Thiollay (1985) records of 73 species seen in Ivory Coast, including one species, the Bluethroat, new to the country and evidence of nesting activity by 5 species for which Thiollay (op. cit.) questions the status, are given.

RESUME

Comme supplement de la check-liste de Thiollay (1985) renseignements sur 73 espèces vus à la Côte d'Ivoire, y compris une espèce nouvelle au pays, la Gorgebleue, et l'evidence de l'activité nicheuse de cinq espèces pour qui Thiollay (op. cit) mit en doute le status, sont donnés.

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Dr. J. Frank Walsh

80 Arundel Road, Lytham St. Annes, Lancs, FY8 1BN, UK.

PROCEEDINGS OF THE INTERNATIONAL CONFERENCE ON THE QUELEA:
ECOLOGY, MANAGEMENT, POLICY

Edited by C.C.H. ELLIOT and M.M. JAEGER,
FAO, Rome. Pp 132.

This book is a collection of abstracts of papers presented at an International Conference on the Quelea in Nairobi, Kenya, in January 1985. It also presents questions, answers and comments which followed each presentation. Although brief, the coverage of topics is diverse including historical background, progress and development in Quelea research and control. The book looks at logistic problems of Quelea control and the need for some form of regional cooperation to enhance research and control. Subsequently, the book unifies these topics by pointing out the need to look at future Quelea research and control in the context of ecologically sound pest management programmes.

The book is of interest to general ornithologists, but more particularly to those with an interest in economic ornithology, agriculturists, students and research biologists. It is written in English and French.

David N. Manyanza

THE ICBP CONSERVATION EXPEDITION COMPETITION

The International Council for Bird Preservation is an organisation concerned about the conservation, management and wise utilisation of wild birds and their habitats worldwide. In 1986/1987, ICBP will again be running a Conservation Expedition Competition to encourage more expeditions to carry out conservation based ornithological research abroad and to gain experience of international conservation issues and cooperation.

The competition is open to university or other ornithological teams and ICBP will contribute up to \$1,000 to each of the best two proposals and may provide letters of endorsement and management support to the runners-up. Projects will be judged on their conservation content, feasibility and likely impact; they must involve a local counterpart and have clearance from the host government and/or a local institute.

In 1986, awards went to teams planning ornithological surveys of the Reserve Naturelle no. 12 Marojejy in Madagascar and Rio Mazan in southern Ecuador. The two expeditions have been incorporated into ICBP's Conservation Programme which includes nearly 100 conservation projects all over the world.

To enter the competition, a project proposal must be submitted to the ICBP Secretariat not later than 31 January and prizes will be announced at the end of March. Full details and entry forms are provided in a guide to the competition, which costs £3 and can be obtained from ICBP, 219c Huntingdon Road, Cambridge CB3 0DL, England.

COMMUNIQUE

L'institut Français de la Recherche Scientifique pour le Développement en Coopération (ORSTOM) porte à la connaissance de la communauté scientifique des ornithologues amateurs et professionnels la création de la station ornithologique de Mbour, située à 80 km au Sud de Dakar. Ce Centre de recherche est spécialisé sur l'étude de l'écologie des espèces paléarctiques et éthiopiennes ainsi que sur les divers aspects liés à la conservation du patrimoine avifaunistique et à l'intégration de l'homme dans les projets de protection des écosystèmes naturels.

La station de Mbour constitue à cet effet une nouvelle antenne sur la façade atlantique et reste à la disposition des biologistes de tous horizons pour échanger des informations de nature à accroître nos connaissances sur l'avifaune résidente et migratrice de l'Ouest Africain.

Mr Francoise BAILLON
Station d'Ornithologie
ORSTOM - Tel. 57.10.44
B.P. 50 - MBOUR
Republique du Senegal

Mr Charles ROUCHOUSE
Mas du Marquet
La Plaine Gras
07700 BOURG-St-ANDEOL
Tel. 75.04.25.07
FRANCE

SYMPOSIUM

Birds of Evergreen Forest 8 - 10 September 1987 at The Wilderness, Cape Province, South Africa. Papers and posters on the following topics: forest bird communities, biogeography of forest birds, population biology of forest birds, conservation of forest avifaunas. Prospective participants should contact the Symposium Organising Committee, E.C.W.3.S., P.O. Box 1305, Port Elizabeth, 6000, South Africa.

GABAR - A NEW JOURNAL COVERING AFRICAN RAPTORS

GABAR (Growth and Biology of African Raptors) is a new journal publishing material on African raptors, here defined as eagles, hawks, harriers, buzzards, falcons and owls, i.e. excluding vultures, seabirds and other predatory birds already covered by specialist publications in the region. Contents will include: short papers on completed studies, progress reports on ongoing research, short notes, unusual sightings, conservation problems and a Forum in which opinions, continuing controversies, constructive criticisms and new ideas are aired and challenged. The first edition has been printed and copies can be obtained free of charge from the address below. Subsequent editions will be distributed on receipt of a subscription fee.

Robert Simmons
Editor - GABAR
Dept. of Zoology
University of the Witwatersrand
Johannesburg 2001
Republic of South Africa.

7TH PAN-AFRICAN ORNITHOLOGICAL CONGRESS

Announcement - A wonderful opportunity to observe African wildlife, and birds in particular, to see what research is currently under way there, and to learn of conservation problems in the Afrotropics is presented by the 7th Pan-African Ornithological Congress, to be held in Nairobi, Kenya, 28 August to 5 September 1988. This will be the first such Congress in the heartland of tropical Africa. The International Council for Bird Preservation will have one day on the programme. A theme will be problems of the

Afrotropical forest avifaunas, with a coordinated excursion of 2 days in mid-Congress to selected, threatened Kenyan forests. There will be symposia, contributed papers, poster sessions, and, importantly, round-table and workshop sessions that emphasize the significance of birds locally (birds problems for man, such as crop destruction and aircraft collision with birds, as well as man's problems that affect birds). Circular 1 has been prepared, and is available from Congress Organizer Don A. Turner (P.O. Box 48019, Nairobi, Kenya), to whom one should write concerning all details.

Nairobi is a modern, international city situated close to major parks and game reserves. The Kenyan avian physiologist Prof. Geoffrey Maloiy is Chairman of the Local Committee on Arrangements. Prof. David Pearson (Dept. of Biochemistry, University of Nairobi, P.O. Box 30197, Nairobi, Kenya) is Chairman of the Scientific Programme Committee. The Congress Vice-Chairmen are Robert Dowsett, Gerard Morel, Lester L. Short and Jean Pierre Vande Weghe.

East Africa represents the last bulwark of the earth's Pleistocene faunas - come and see them under ideal conditions! - Lester L. Short, American Museum of Natural History, New York, N.Y. 10024-5192, U.S.A.

COLOUR RINGED LITTLE EGRETS

Since 1981 we have been colour-ringing Little Egret (Egretta garzetta) nestlings in the Camargue, Southern France, as part of a long-term study of their population dynamics and movement.

There is increasing evidence that the majority of this population winters in West Africa and four of these birds have already been observed in Senegal. In addition, Little Egrets ringed with metal rings in the Camargue have been recovered in the Gambia, Mali and Ghana. In order to better define the areas used by these birds and the occurrence of any seasonal movements, we would be grateful if ornithologists working in, or visiting, any wetlands in West Africa could look out for and report to us any observations of colour-ringed Egrets.

The colour rings are placed on the tibia. Up to three rings per leg have been used in the following colours: red, blue, green, white and orange. More recently we have used tall (22 mm) rings which are engraved with up to 3 horizontal stripes. The stripes may be 'thick' (4 mm) or 'thin' (1.5 mm). Thus to correctly identify a colour ringed Egret it is necessary to record, for both legs, the colour of the ring or rings and in the case of striped rings the position (top, middle or bottom of the ring) and thickness of the stripes.

Observations should be sent to Dr. H. HAFNER, Station Biologique de la Tour du Valet, le Sambuc 13200 ARLES (France).

We will be happy to send details of when and where birds were ringed and what is known of there subseugent life history.

MARQUAGE D'AIGRETTES GARZETTES AVEC DES BAGUES COLOREES

Dans le cadre d'une etude sur la dynamique de population de l'aigrette garzette, (Egretta garzetta) nous avons bague chaque annee et cela depuis 1981 des poussins d'Aigrettes en Camargue, midi de la France. Pour cela, ont ete utilisees des combinaisons de bagues de couleur permettant une reconnaissance individuelle. De part ce baguage on sait deja qu'une partie de cette population hiverne en Afrique de l'Ouest. Quatre de ces oiseaux bagues anterieurement avec des bagues en metal ont ete reperes en Gambie, au Mali ainsi qu'au Ghana.

Afin de mieux connaitre les sites importants pour ces oiseaux ainsi que leurs deplacements, nous souhaiterions que nous soient communiquees toutes observations d'Aigrettes baguees. Les bagues sont placees sur le tibia. Le nombre de bagues par tibia peut varier de 1 a 3. Les couleurs utilisees sont: blanc, vert, bleu, rouge, orange. Plus recemment, nous avons utilise egalement de grandes bagues (22 mm de haut) comportant des traits noirs horizontaux. Ces traits sont soit epais (4 mm) soit minces (1.5 mm). Une bague peut comporter jusqu'a trois traits: haut, milieu, bas.

Pour identifier de maniere correcte une Aigrette baguee, il est necessaire de transcrire pour les deux pattes la ou les couleurs des bagues, et dans le cas des bagues comportant des traits, leur epaisseur ainsi que leur disposition (haut, milieu, bas).

Tout observations devrait etre envoyee a M.H. HAFNER, Station Biologique de la Tour du Valat, le Sambuc 13200 ARLES (France).

Bien entendu nous communiquerons aux observateurs toutes les donnees dont nous disposons (age, date et lieu de baguage) sur les oiseaux reperes.

BIRDS OF LIBERIA

Wulf Gatter is writing an annotated checklist about birds of Liberia/West Africa. He is interested to collect birds notices of this occidental African country as well as offshore records.

Names of correspondents will be notified in the published text. Contact Wulf Gatter, Buchsstrasse 20, D 7318 Lenningen, Federal Republic of Germany.

THIRD WORLD CONFERENCE OF BIRDS OF PREY, ISRAEL, 1987

This International Conference will be held from 22 to 27 March 1987 at Eilat, in Israel. It will be organised by the World Working Group on Birds of Prey in conjunction with the Israel Raptor Information Center and the U.S. Hawk Mountain Sanctuary Association.

It will consist of 7 paper sessions, each of which may occupy up to one whole day. The themes and their organisers will be:

1. Conservation and biology of rare raptors-B.U. Meyburg & N. Collar.
2. Conservation and biology of rare owls-R.J. Clark & H. Mikkola.
3. Raptors on migration and wintering grounds-M. Fuller & J.M. Thiollay.
4. Population biology and breeding-I. Newton.
5. Raptors in polluted environments-R. Risebrough & J. Ledger.
6. Education-Y. Leshem & J. Brett.
7. Legislation-P. Robinson.

Contributions to these different themes can also take the form of poster papers.

This conference will take place within the framework of an international festival which will include a raptor photography competition (under the patronage of Eric Hosking), a painting and drawing competition (patron, Roger Tory Peterson), a film festival and competition, and ornithological and cultural excursions and tours.

At this season the famous and massive migration movement of raptors over Eilat is in full swing. This, in 1985, included 1.1 million raptors of 30 species.

For further information, write to the Hon. Secretary of the World Working Group: Mr R.D. Chancellor, 15 Bolton Gardens, London SW5 0AL, U.K.



RECOMMANDATIONS AUX AUTEURS

Malimbus publishes papers, short notes, reviews, letters and illustrative material. Contributions should be typed on one side of the paper with double spacing and wide margins. Wherever possible papers first should have been submitted to at least one ornithologist or biologist for critical scrutiny.

Textual matter will be retyped for offset printing, but FIGURES should be prepared as for final reproduction, allowing for 20% reduction, using Indian ink on good quality white paper, and Letraset and Letratone lettering and shading (or equivalent) as appropriate.

CONVENTIONS regarding tabular material, numbers, metric values references etc. should be carefully adhered to and can be sought in this and other issues. Articles containing lengthy SPECIES-LISTS should be tabular format (eg Malimbus 1:22-28 or 1: 49-54) or of the textual format of Malimbus 1: 36-42 for short texts per species or Malimbus 1:90-109 for longer texts.

From Vol. 9 (1987) onwards all references must be entered into the bibliography of each Paper or Short Note.

OFFPRINTS 20 offprints of Papers (but not of Notes) will be sent to a single author, gratis, upon request. 10 additional offprints will be issued in respect of a second and a third author of a paper, but they will be photocopies. Offprints will not be stapled, bound or covered; they are merely cut from copies of the journal.

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